Distinctively dysfunctional: State capitalism 2.0 and the Indian power sector

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Abstract

State intervention in India has persisted but has proved far from immune to critiques of traditional dirigisme. An examination of the power sector shows that waves of reforms since 1991 have together created a hybrid and regionally differentiated state-market system. Blurring the public-private boundary, this reinvented "state capitalism 2.0" displays both refurbished modes of intervention and new governance arrangements with private players. Nonetheless, as the power sector's continually dismal condition suggests, this state-capitalist hybrid has not (yet) provided a coherent alternative to older dirigisme or the Anglo-American mode of "deregulatory" liberalization. Instead, between 1991 and 2014 its ad hoc, layered emergence generated distinctive forms of dysfunction. Coupled with competitive politics, its ever-increasing institutional complexity rendered it internally incoherent and vulnerable to rent seeking on multiple fronts. Power sector evidence suggests that state intervention in India has remained simultaneously indispensable and dogged by persistent administrative and financial difficulties. Examining its internal institutional transformations helps to explain the apparently contradictory nature of the contemporary Indian state: at once business-friendly, populist, and often underperforming.

1 Reinventing state intervention

In recent years state intervention has enjoyed a renewal of academic interest. Scholars wrote of the "flexible" or "hidden" developmental states of pre-recession Ireland and the United States (Ó Riain 2000; Block 2008), the rise of a more "regulatory" form of state activism in China (Yang 2004; Hsueh 2011), and the "new", "liberal", or "renewed" developmentalism of Brazil, then still growing strongly (Ban 2013; Trubek 2013; Hochstetler and Montero

2013). This nascent literature suggested that the state activism of the twenty-first century was far from a return to the old centrally planned dirigisme of the twentieth: the state's forms and activities had been transformed in the face of changing economic and political contexts.

According to this interpretation, the second generation of state intervention has two interrelated "vocations" (Levy 2006: 368). It is corrective, seeking to repair ineffectual elements in older national models—often in line with Washington Consensus-style critiques. But it is also constructive, oriented towards creating, supporting, and adjusting rather than dominating markets. As such it is characterized by new forms of public-private governance arrangements and the increasing exposure of state agencies to the discipline of market competition, however asymmetric in practice (Trubek 2013; Musacchio and Lazzarini 2014). This fusion of dirigisme and liberalization has many labels, but perhaps the most catchy and evocative is "state capitalism 2.0".[1]

For a brief moment in the aftermath of the 2008 global financial crisis, state capitalism 2.0 captured attention as a possible alternative to the Anglo-American deregulatory model. India often featured as a marginal example in these discussions; and perhaps the most influential strand of recent political-economy research on the subcontinent has corroborated the notion of a revised and increasingly private-sector-oriented state interventionism.[2] How, then, does India's variant of state capitalism 2.0—the combination of state activism and elements of the Washington Consensus—actually *work*? Does it really amount to anything like a coherent alternative to outright liberalization?

The present chapter explores these questions using a case study of a crucial sector, the electricity supply industry, from 1991 to 2014. Electricity lies at the heart of India's distributive politics and the drive for economic growth. Existing examinations of the Indian state have often focused on capital, land, and labour, but energy—and especially electricity—is the other key input for contemporary capital accumulation. As such, it deserves a central role in accounts of state transformation. The power sector is also a bellwether of institutional change. While the international postwar consensus saw electricity as a natural monopoly best

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[1] The term "state capitalism 2.0" owes its inspiration to the work of Aldo Musacchio in particular, especially in his interventions in the business press. See also Nölke (2014), who prefers "state capitalism 3.0" for this same phenomenon. While a plethora of terms have attached themselves to the phenomenon, "state capitalism" neatly emphasizes continuities in state involvement and the close links between state and capital.

[2] Atul Kohli has argued that "[w]hile some liberalization is real, Indian state remains activist" but increasingly "pro-business" (2007: 108). This "pro-business interpretation" has been widely endorsed by Indian political-economy scholars (if not their neoclassical counterparts): a 2013 workshop—including Pranab Bardhan, Vijay Joshi, Mushtaq Khan, James Manor, R. Nagaraj, Pallavi Roy, Kunal Sen, Alpa Shah, Aseema Sinha, Louise Tillin, and Michael Walton—upheld Kohli's core distinction between the "pro-market" (open competitive) policies characteristic of textbook liberalization and the "pro-business" (activist pro-incumbent) policies associated with India's "pro-business tilt" since the 1980s (Tillin 2013: 21).

left to the public sector, power generation was the first sector in India opened to private investors in 1991. This began a quarter-century of reform and re-regulation, significantly inflected by regional variations as the crucial distribution segment remained in the hands of subnational (state) governments. The power sector is therefore an important—and often overlooked—case through which to study the distinctive trajectory of institutional change that India's haphazard and partial liberalization has brought.

At the same time, the sector's fate provides salutary lessons about the contradictions and dysfunction that plague India's reinvented interventionist state. In many states tariffs for industrial and commercial consumers are extremely high and supply remains inadequate, characterized by power cuts and voltage fluctuations. In contrast, populist subsidies persist: huge proportions of electricity generated is systematically stolen or given cheaply to farmers and residential consumers, although these groups also suffer from the poor quality of supply—a "low-level equilibrium" trap (Dubash 2007). Around 300 million Indians remain without access to electricity altogether. This crucial sector thus demonstrates the same contradictions noted more widely in India: between pro-business and populist politics, rapid economic growth and policy incoherence.

This chapter examines the power sector since 1991 in order to shed light on state capacity in India during the economic reform era. It first outlines the key changes to the state's form and functions in the sector between 1991 and 2014, during which time the state continued to play myriad roles, new and old (Section 2). Dirigisme and liberalization are not neatly "fused" to create state capitalism 2.0. Instead, reinventing state intervention through the incorporation of liberalized elements is a haphazard process that differently inflects various institutions. Constrained by political interests, power reforms proceeded not through displacement of older statist organizations but through a process of ad hoc institutional *layering*, or organizational creation without much destruction. Rather than supplanting the older system, liberalized and unreformed segments continued to exist in parallel, even intertwined. The result is a public-private system in which different groups can exercise influence via different state agencies and tiers. This state-market hybrid has exacerbated the sector's existing predicament, and even generated new sources of financial and administrative dysfunction (Sections 3 and 4). Contributing to the nascent body of research on liberalized "new developmental states", this paper therefore suggests that, at least until 2014 and in the power sector, state intervention in India remained simultaneously indispensable and dogged by persistent policy failings. India's is a "weak-strong state", remaining both more

interventionist than is often acknowledged and yet also less coherent.[3] Understanding its apparently paradoxical dynamics—going beyond the unhelpful truism that it is "Janus-faced"—requires unpacking the state's institutional structures themselves.

2 The state's changing form and function: liberalization as layering

In the first decade after India's independence the state secured control over the power sector.[4] Responsibility was constitutionally shared between the centre and provincial states: while the centre provides broad policy direction, it is the states that control the crucial "last mile" of distribution. Throughout the 1950s the states tightened their grip. The key institutions were the state electricity boards (SEBs), vertically integrated monopolies under the politicized control of state governments, which controlled almost three-quarters of generation and virtually all distribution by 1991.

The most important outcome of this institutional settlement was the emergence at the subnational level of an incoherent and financially ruinous politics of populist electricity subsidies and widespread power theft. While in the early years after independence tariff structures were generally established to favour industrialists, gradually this balance altered to favour wealthier agriculturalists. This shift was especially pronounced in states with powerful agricultural lobbies—Tamil Nadu, Andhra Pradesh, Punjab, Haryana, and Maharashtra, for example—which were in turn reinforced by the subsidies, rendering these regional political economies of power path-dependent (Kale 2014a). Cost recovery was only around 79 per cent by 1991 and power subsidies were some states' largest budgetary burden, creating a vicious circle of underpayment, underinvestment, and deteriorating performance.

Grafting on private participation

By the 1980s, it was widely agreed that the sector required overhauling. Outright dismantling of the flawed statist system was both ideologically and politically difficult to imagine, however. While a surprising number of politicians agreed that some degree of private participation was desirable, if not inevitable, none were inclined to moot full-scale

[3] Rudolph and Rudolph (1987) originally used the paradoxical idea of a "weak-strong state" to capture the robustness of India's public institutions on one hand, and the state's failure to penetrate society, especially in rural areas, on the other. The present chapter is somewhat less sanguine about the country's institutional capacity at the centre, but similarly contends that the crucial role of the state in India's political economy has continued into the twenty-first century.

[4] While the 1956 Industrial Policy Resolution reserved generation and distribution for the public sector, the small number of existing private units (primarily in cities) continued to be tolerated.

privatization.[5] More importantly, powerful interest groups—such as farmer lobbies and the politicians who courted them with power subsidies—had become more entrenched over time within the existing system. Even when chief ministers became convinced of the case for power reform as the 1990s progressed, sustained implementation would prove slow and painful, as shown by the faltering of reform in early movers such as Uttar Pradesh, Haryana, and Andhra Pradesh.

These constraints helped to shape a distinctive trajectory of reform. The power sector has not simply witnessed an undifferentiated process of "liberalization", but a more complex process of institutional layering. Layering refers to a dynamic of gradual institutional change whereby new or renegotiated organizational elements do not supplant or eliminate preexisting structures, but are superimposed or grafted onto them (van der Heijden 2011). It is the product of political strategy as well as inertia: because "[e]stablished institutions create constituencies for their preservation", it is "typically easier to add new institutions than to dismantle preexisting ones" (Schickler 2001: 252).

The results of liberalization-as-layering are also distinctive. Rather than a steady process of deregulation toward an ideal-typical liberal-market economy, it produces a form of improvised "patchwork". Old, new, and reinvented organizations come to coexist, although cumulative change may be substantial. Of course, no process of reform ever completely erases older structures.[6] Rather than this very generic consequence, I suggest, the distinctive institutional product of layering is a messy system of *segmentation*, in which a liberalized zone emerges in parallel (or rather entangled) with existing statist organs.[7]

With radical institutional dismantling politically unfeasible, reform in the power sector accordingly took the form of the ad hoc accretion of new agencies. The entry of the private sector into the state-dominated power system proceeded through a series of incremental policy changes which began to create a dual system, incorporating private participation in parallel with the pre-existing public system rather than displacing it. First came the opening of a "back door" to private participation through loosened regulations on captive generation for large consumers, creating a readymade constituency for greater private

[5] The opinions of many senior politicians, from a range of states and political parties, can be found in Department of Power (1989).
[6] The classic example is Pierson (1994) on the limits of welfare state retrenchment even under Reagan and Thatcher.
[7] This has some similarities with the concept of "dualization", most often applied to labour markets, in which a core of favoured insiders coexists with an increasingly large set of informal workers. In the case of the power sector, this latter term risks overemphasizing the neat, binary quality of the segmentation.

participation.[8]

1991 brought more explicit reform: as in much of Asia, independent power producers (IPPs) were invited to establish projects, encouraged with a variety of generous incentives and central guarantees—as Enron's Dabhol project in Maharashtra would make notorious. With the amendment of the 1948 Electricity (Supply) Act, the IPP policy focused narrowly on increasing generation capacity and mobilizing scarce capital, thereby "promising to support rather than dismantle the existing [political-economic] matrix" (Kale 2014a: 99). The emphasis was not on privatization, but the introduction of new greenfield projects in parallel with the public system. This logic would continue through the mooted mega projects of the later 1990s and accelerated with the ultra mega power projects of the twenty-first century, partnerships which combined private participation with renewed state activism.

As has often been pointed out, the early focus on generation left the system's major problems—primarily the politicization of the distribution segment—virtually untouched. The second phase of reform saw subnational experiments with distribution reforms. The third phase, the comprehensive legislation passed as the Electricity Act of 2003, attempted to mandate competition in the segment, by enabling large consumers to purchase power directly from the market ("open access") instead of relying on local power utilities. On paper, it marked a striking attempt to *displace* existing institutions with an alternative operating logic, an ambitious attempt to go beyond patchwork solutions.

Yet even after distribution was recognized as a gaping hole in the reform process, politicians and technocrats have struggled to reform the segment. Of all the states, only Odisha and Delhi have privatized distribution, the former with major financial difficulties—by 2015 all its distribution utilities had returned to government control—and the latter prompting a major populist backlash in the form of the Aam Admi Party. In practice, many states remained reluctant to cede control over their most lucrative customers, resorting to high charges to discourage exit and thereby stymying open access from above. Private investors, too, have generally been wary of becoming enmeshed in this most politicized and financially troubled of segments. As this suggests, there have so far been striking limits to outright liberalization in the sector.

The resilience of state intervention

Throughout this process, the state has continued to play a crucial role, both through inertia

[8] Similarly, in 1994 the government permitted firms invested in power generation, cement, and steel projects to establish "captive" coal mines, laying the groundwork for the later "Coalgate" scandal (Jenkins 1999: 190).

and necessity. The notion that reform could mean reconfigured rather than reduced state intervention both predated and survived 1991. The centre in particular repeatedly attempted to bolster its hand against the states through direct intervention in the sector.

While distribution remained the purview of intransigent state governments, generation, transmission, and infrastructure financing have consistently provided greater opportunities for the centre to exert leverage. Central public sector enterprises (CPSEs) in thermal and hydroelectric power generation were accordingly established in the mid-1970s, followed by the central transmission utility Powergrid in 1989. Explicitly introduced to provide an exemplar of public sector best practice, the National Thermal Power Corporation (NTPC) remains one of Asia's largest power generation companies. These CPSEs continue to be used (with modest success) to strong-arm state utilities into more responsible fiscal behaviour; NTPC even took over Odisha's Talcher plant in 1997 for nonpayment. At the same time these are not the same CPSEs as those of the 1970s: they have subsequently been corporatized and granted varying degrees of autonomy, as part of a parallel (if unarticulated) drive for institutional reform (Chatterjee 2017b).

The centre also created major financial corporations, most notably the Rural Electrification Corporation (in 1969) and the Power Finance Corporation (1986), to guide policy development along its favoured lines through loan conditionalities; this approach continued into the era of centrally sponsored schemes and new, state-backed infrastructure investment funds in the 2000s. Both of these trends were bolstered by the desire to encourage further resource exploration, including overseas, and the development of renewable energy investments. By adding another layer of agencies under the line ministries, though, the central apex would inadvertently increase the sector's institutional complexity, exacerbate interministerial conflicts, and reinforce its own infrastructure agencies' abilities to act in their interests rather than those of a single coherent policy, as we shall see.

This project of state reinvention was reinforced from another direction. The perceived excesses of the sector's ad hoc opening and the courtship of private capital provoked an awkward oscillation between deregulation and *re*regulation, testifying to the tensions between state and market inherent in India's evolving form of state capitalism. In view of the egregious corruption that became attached to the IPP policy in the 1990s, for example, the centre moved to develop model concession agreements, and to emphasize competitive auctions over discretionary selections. Electricity regulatory commissions were also introduced at both the state and central levels, and made mandatory in 1998. A alternative history could be written of electricity reregulation coterminous with deregulation: as in the

global North, policymakers are beginning to recognize that market regulation, environmental concerns, and "turning and keeping the lights on" may all require "more (and improved), not less, state capacity" (Dubash 2011: 71).

Yet this regulatory transformation of the state ought not be overstated; changes in form sometimes ran ahead of function. India's power reforms did not occur in a vacuum, but at least in the first decade after 1998 echoed an international template then endorsed by the World Bank. The result was something of an "add-and-stir" approach to regulators, which were imported at the state level with little domestic discussion; Navroz Dubash reports that the unlikely pioneer, Odisha, included them as "a somewhat formulaic appendage to a larger sector-reform process" in order to appease private investors and international donors (2013: 102). In several states they have been integrated only half-heartedly, and instead appear as a supplemental layer of institutions with an ambivalent relationship to the state governments, state utilities, private investors, and consumers. The Electricity Act, passed in 2003, continued in this mode, assuming that "an apolitical regulatory sphere" could be successfully sutured onto the politicized power system "simply by legislating one" (Dubash 2013: 103). India's reinvented state capitalism may now demonstrate some of the morphological features of the European-style "regulatory state", but it has certainly not been entirely colonized by technocrats (see also Dubash and Morgan 2013).

The segmented public-private system

As Dubash has argued, "it would be more accurate to describe the market as grafted on to rather than replacing the state sector, and with decidedly mixed results" (2011: 69). The result of these piecemeal, layered reforms—private collaboration on one hand, and resilient or reconfigured modes of state intervention on the other—was not the fully liberalized market system in line with the so-called World Bank template for power reforms. Instead, it produced a "dual" or "hybrid" structure which "combin[ed] attributes of the state- and market-based systems" (Victor and Heller 2007: 30).

This hybridity proved highly uneven across the segments of the electricity supply industry. The last decade saw a very rapid expansion of private generation, so that in late 2014 private producers outweighed state-level producers for the first time: today around 44 per cent of on-grid generation capacity lies in private hands, compared to 31 per cent for the states and 25 per cent for the centre, although the central generation enterprise NTPC has also

continued to flourish.[9] However, transmission is still overwhelmingly dominated by public sector companies. Outside Odisha and a handful of cities, the crucial distribution segment remains in the hands of state administrations. State agencies thereby retained crucial roles as producers, financiers, and regulators.

Even where public sector agencies continued to dominate, their activism nonetheless took new forms. Morphologically, by 2014 the power system included a variety of institutions whose characteristics and activities blurred the crude dichotomy of public and private ownership. New or reworked organizational forms—such as imported regulatory agencies, corporatized CPSEs, and public-private partnerships—had been grafted onto the older statist system. Given the sector's "rent-thick" character, even the private players who especially captured the benefits of the sector's opening were inextricably linked to and dependent on state resources in ways which conditioned their structures and practices, developing into large, vertically integrated conglomerates with extremely close ties to policymakers.[10] The state thereby remained at the heart of the sector, even as private enterprises sought to leverage benefits from their asymmetric influence over this control.

Yet this reinvented state capitalism has not so far amounted to a coherent alternative model either to the old state-dominated power system or to the "World Bank template" for deregulation. Instead it has allowed underperformance to persist, and undermined efforts to develop a coherent energy policy that integrated upstream and downstream concerns. The following sections concentrate on two dimensions of this failure: its *financial* dimension (the coexistence of resilient "populist" subsidies with apparent "crony capitalism") and its *administrative* dimension (the fragmentation of administrative control, leading to increasing policy paralysis). The two are interlinked: institutional proliferation has facilitated the proliferation of rent-seeking and rents—competing interest groups are differentially able to penetrate institutions—even as institutional fragmentation has weakened the central apex's ability to bolster the state apparatus against societal penetration.

3 Dysfunction (1): segmentation and proliferating rents

Section 2 introduced the idea that power sector reforms in India have often proceeded through a process of institutional layering, through which new elements are grafted onto an older system rather than displacing it. Superficially this trajectory resembles one of the most

[9] Central Electricity Authority figures, dated 31 July 2017.
[10] Since around 2011 such firms have faltered, hit by overleveraging, insecure fuel supplies, and an overall glut of private power investments.

influential interpretations of this gradual liberalization, Rob Jenkins' "reform by stealth" (Jenkins 1999). Jenkins argued that this type of gradualist institutional layering, rather than outright institutional displacement, facilitated reform; it was a political strategy to ensure that resistance could not coalesce around dramatic reforms (and, he added, it was accompanied by strategic rent-sharing to buy unexpected sources of support).

Yet this compartmentalization works both ways. "Reform by stealth" produces cumulatively important liberalizing changes. But it also leaves unreformed zones outside its heartlands, and yet which are not in practice isolated from the reformed zones of the economy—that is, it produces *segmentation*. Such segmentation fragments the spread of reforms, just as Jenkins predicted it would fragment resistance. It provides multiple points of entry both for "new" private rent-seekers to influence the policy process, and veto points at which "old" rent-seekers can protect their own subsidies. This is true both of the segmentation of the policy process (multiple agencies at the federal and state level which can be lobbied) and the technical segmentation of the power cycle (into fuel supply, generation, transmission, and distribution). Competing interests can dominate in different domains of the power sector.

The result is that the proliferation of institutions—with only a weak hierarchical authority—has facilitated a proliferation of rents and rent seeking.[11] In the medium term, institutional segmentation blocked the sweeping displacement of older rents but it also facilitated the expansion of new rents. In many states, the older populist subsidies, alongside tolerance of widespread theft (an informal subsidy), did not disappear with liberalization. In 2011 all-India agricultural users continued to use 23 per cent of power but pay for only 8 per cent (up from 4 per cent a decade earlier) (Pargal and Banerjee 2014). Instead, they were supplemented by subsidies for politically connected producers in the form of preferential loans, cheap access to land and fuels, and access to policymakers auctioning projects.[12]

These two sets of rent-seekers, "old" and "new", operate through quite different modes of influence on the state: it is the state's incoherence which they can both exploit and has thus far allowed them to coexist. To caricature a rich vein of political activity, the "old" rents for wealthy farmers and residential consumers are often secured through electoral politics and popular agitations at the subnational level, through everyday political interference with tariff setting or street-level tolerance of theft. In contrast, the "new" rents

[11] This link between institutional complexity and proliferating rents has been made by neoclassical scholars; see especially Shleifer and Vishny (1993).
[12] For further details on this dualistic system of rents, see Chatterjee (2017a).

for politically connected private producers are secured more through lobbying at the higher levels of government at the centre and states where policy is formulated, supplemented with attempts to secure improved implementation terms on a case-by-case basis after the fact (Kochanek 1996).[13] This masks considerable complexity, of course: as noted below, for example, the power and fertilizer ministries have often taken up the banner of the *aam admi* (common man) versus the upstream ministries.

This segmentation of influence continues into the power sector itself. These new private players are concentrated in the more lucrative generation segment. Meanwhile, outside the purview of the profitable CPSEs the statist residual, notably in the distribution segment, remains financially viable only through underpayments, bailouts, and systematic supply rationing (scheduled load-shedding). More recent policy initiatives resemble attempts to institutionalize a segmented, dualistic system more explicitly. Increasing attention to urban distribution franchises, the rise of short-term market power purchases alongside long-term contracts, and special economic zones with dedicated power plants again attempt to create parallel systems. Without decent regulation, such a solution risks ceding "all the family silver (big cities, industrial areas, and SEZs [special economic zones])" to private players (Kumar and Chatterjee 2012: xiii). Lower-revenue consumer categories, such as poorer consumers in rural areas, will be left to increasingly decrepit public utilities.

In practice, these "dual tracks" are intertwined. A market has been grafted on to an insolvent state system, and indeed ensures that the state system remains insolvent: these proliferating rents are funded in large part through short-term exploitation of natural resources, milking central state-owned enterprises and government control of the financial system,[14] and suppressing demand (Chatterjee 2017a, 2017b). In this way, "financially viable units (generally privately owned) and insolvent systems (generally state-owned) can co-exist" in "a system in which parts of power generation and delivery are profitable even as other parts are plagued by nonpayment, inadequate investment, and economically inefficient operation" (Victor and Heller 2007: 289, 30).

Jenkins' "reform by stealth" thesis was accompanied by a bold analysis of the state elite's room for manoeuvre: following Rudolph and Rudolph (1987), he suggested that the competition between India's rival elites might open up greater room for independent state action (Jenkins 1999: 38). Yet in reality the Indian state is far from monolithic, and the state

[13] Attempted tariff renegotiations are endemic in the energy sector, with companies making surprisingly low bids to secure projects and then seeking to renegotiate terms upwards.
[14] On government exploitation of public sector banks and institutions such as the Life Insurance Corporation, see Vaidyanathan and Musacchio (2012).

apparatus itself was not cohesive enough to resist the parallel pulls of pro- and anti-reform constituencies. Reform by stealth thus did not merely fragment societal interest groups, but exacerbated the fragmentation of the state.

4 Dysfunction (2): the underlying crisis of control

In the Indian power sector, the central government's authority was weakened virtually from the outset. In the Emergency's aftermath it became common to imagine that India's constitution was an unusually unitary one, but early observers were more likely to critique the centre's weakness. A Ford Foundation report, much discussed within the Nehru administration, concluded that "the Centre is without any real powers in almost the entire field of development" and "fundamentally lacking in administrative authority" (Appleby 1957: 45, 10; see also Sinha 2005: 72–3).

This was particularly pronounced in the power sector. The colonial prehistory of Indian electricity was regionally variegated (Kale 2014b). The constitutional division of responsibility only exacerbated this divergence. As noted above, this federal asymmetry of power and information helped to create regional political economies of populist power subsidies and theft, settlements which have proved extraordinarily difficult to alter subsequently in many states (Kale 2014a).[15] Regional variance is only one side of the story; the other is state incoherence at the central apex itself. The centre's organs of coordination remained feeble: by the mid-1960s the Planning Commission was already being marginalized by powerful and often quarrelsome ministries, while the Central Electricity Authority, virtually moribund into the mid-1970s, was considered by the SEBs and other state agencies merely "a hurdle to be negotiated" (Department of Power 1980: 110).

It is with vertical control problems—the difficulties of federalism—that the power sector is particularly associated, and despite occasional calls to change it, this constitutional settlement looks very unlikely to change in the era of political regionalization. But even within these limits, the centre's authority was decisively weakened. *Horizontal* coordination and control proved an underrated problem. It is often overlooked that liberalization and the regionalization of Indian politics coincided with a proliferation of state agencies and programmes.

The rise of coalition governments from 1989 led to a proliferation of ministries. In July 1992 the single energy ministry created under Indira Gandhi was trifurcated to create

[15] Change is not impossible: Gujarat is the most celebrated example of a state with powerful farmer lobbies that has nonetheless managed a turnaround.

separate ministries of coal, power, and new and renewable energy. "Perhaps the performance of no other infrastructure sector depends so heavily on the cooperation of other Ministries," one power secretary reflected in his memoirs (Abraham 2009: 307); yet the fragmentation of the old Ministry of Energy left power policy divorced from its essential relations with the upstream industries. Through the rise of private lobbying and centrally sponsored schemes, power increasingly spread to these large, cash-rich infrastructure ministries. Infrastructure ministries thus gained in power and frequently pursued their own corporate interests, while the hierarchical authority that nominally coordinated them declined.

Until 2014, then, India's energy bureaucracy became increasingly "byzantine and fragmented" (Dubash 2011: 68). The result was internecine infighting and the absence of a coherent energy strategy. Individual projects and reforms were frequently delayed. As Modi's then-new minister of an overarching energy portfolio, Piyush Goyal, put it: "One Ministry would propose, and another would dispose. Ministers and Ministries would be consistently at loggerheads with each other, and stories on interministerial turf-wars were a matter of bureaucratic legend" (2014: 6–8). The power ministry repeatedly blocked attempts by the upstream ministries to raise fuel prices to market levels, while one newspaper found that in 2012 a "typical infrastructure project" required 56 permissions from 19 different ministries. Such disputes were mirrored by the enterprises that fell under these ministries: the thermal major NTPC, Coal India's largest client, attacked the coal major for providing sub-par coal, with the feud at one point threatening to cut power to a swathe of eastern and northern India.

Outside the ministries, the problem of state fragmentation was heightened in line with new international notions about power sector governance. The new public management (NPM)-style governance reforms pioneered in the Anglo-American world and mooted by international finance institutions often encouraged state fragmentation through "agencification", the creation of specialist and nominally autonomous bodies to take on particular tasks. Further agencies proliferated, including a layer of regulatory bodies and the Appellate Tribunal for Electricity, as noted above; a set of power trading specialists; an entirely new infrastructure for dealing with climate change; and new infrastructure financing and promotion corporations. If *positive* coordination (purposive attempts to increase coherence) was lacking thanks to the weakness at the central apex, *negative* coordination through alignment of these organizations' missions also frequently broke down. Agencies have frequently challenged the ambiguous descriptions of their divisions of labour or sought to colonize new instruments, as in the case of the central and state electricity regulatory commissions, or the turf war between the central regulator and the Forward Markets

Commission over regulation of power trading, a dispute that reached the Supreme Court. Inside the new administrative layer of nominally independent regulation, then, the organizational fragmentation and rivalries of the old system were replicated.

While such turf wars were hardly new, ministerial fragmentation, the regionalization of politics, and the rise of new agencies all conspired to create an ever more "diffused, fragmented and siloe'd [*sic*] approach to energy policy" (Mehta 2013: 14). In the global North, it was quickly realised that NPM created problems of coordination, especially over "wicked" crosscutting problems such as energy and climate change. India has lagged behind in the "joined-up governance" attempts that have sought to counter state fragmentation as a result of new public management elsewhere in the world; its weak central apex until 2014 developed no coherent response to the challenge. Hierarchical management proved difficult in the fragmentary state. Although it attempted to draft an intersectoral energy policy, the Planning Commission was "often hard-pressed to herd together large and powerful energy ministries" (Dubash 2011: 68) and increasing had to content itself with "working within the interstices of the dense structure of the sectoral ministries to influence policy", as one former member recalled (Desai 2014). At times the Prime Minister's Office (PMO) stepped in, with some prime ministers holding the power portfolio themselves at key moments,[16] but this mechanism remains vulnerable to the idiosyncrasies of the premier's personality, as under the previous prime minister. For the United Progressive Alliance regime (2004–2014), "government by committee"—a form of horizontal management—became the favoured alternative via an endless series of (Empowered) Groups of Ministers, but this became perceived as merely a means for the PMO to shelve or distance itself from difficult issues.

Within the national administration, layering was both a symptom and a further source of declining central coordination. The centre created new institutions to provide it with new tools—whether to create more malleable agencies, to accommodate coalition allies, or to keep "politics" more at arm's length—but this in turn made the coordination of energy policy, within which power is embedded, more difficult. Central policymakers struggled to discipline not only large private firms, but also its own large, powerful agencies. This lack of cohesion is not new (Chibber 2002); in fact, it illustrates the path dependence in the balance of power

[16] Prime Minister Atal Bihari Vajpayee retained the power portfolio during the 13-day BJP minority government of 1996, which extended the controversial central counter-guarantee given to Enron's Dabhol plant. The next premiers, H.D. Deve Gowda and I.K. Gujral (United Front), also retained de facto control under ministers of state; in 1996 Deve Gowda convened a key conference of State chief ministers specifically to discuss the power sector, which agreed a wide-ranging reform programme.

within the state. The process of institutional layering offered no solution to the pre-existing frailty of the central coordinating mechanism, however, but instead often exacerbated it.

This institutional complexity also facilitates the evasion of responsibility when policy (somewhat inevitably) goes wrong. As in the case of the 2012 blackouts, and less dramatically in explaining away the everyday failures to meet targets and improve supplies, different agencies seek to shift blame upwards, downwards, and horizontally to their rivals (Chatterjee 2012). This helped policymakers to dodge responsibility in the short and medium term. Such tactics proved to have limits, however: in the closing years before 2014 the absence of hierarchical authority and monitoring of the system's persistent failures and pro-business scandals prompted a backlash from both the public and regulators. Institutional proliferation and government by committee were popularly re-evaluated as symptoms of "policy paralysis". The system of governance was therefore in a form of administrative crisis by 2014, laying the groundwork for the surprisingly decisive election verdict that summer and providing the new regime with its raison d'être and raison d'état.

In this context Narendra Modi's new government has prioritized administrative change as much as economic reforms, remodelling the central energy bureaucracy. The regime has both sought to make micro-political changes—altering bureaucratic behaviour through increased surveillance—as well as reshaping state organizations, most famously killing off the long-beleaguered Planning Commission and breaking Coal India's monopoly. In the energy sector, the key manifestation of this impulse was the move to "organic ministries", as Modi labelled them. Power, new and renewable energy, and coal were all allocated to a single energy "superminister", tellingly a young minister of state (independent charge) with much administrative talent but no real power base of his own. This combined two modes of hierarchical coordination: a unitary energy authority, but one that could not seriously rival the Prime Minister's Office, which retained the capacity to take key decisions. In 2017 a further reshuffle once again detached ministerial oversight of power from coal, instead bracketing the latter with the similarly overlapping issue of the railways.

This mode of operations has already produced some notable successes, especially in alleviating coal shortages and raising the environmental coal cess (typically blocked by the coal ministry). Yet the current government's programme to restructure the debt of state distribution companies to incentivize reform at present looks little more successful than the ineffectual bailouts of 2002 and 2012. The path-dependent constraints that channelled the power sector's pre-2014 reform trajectory will not easily be dismissed, though the current majority government has an unparalleled opportunity to rewrite the sector's governance. It

remains to be seen if its centralizing, technocratic mode of control will mark the end of the "patchwork politics" of the half-liberalized system, or will amount to a workaround rather than a recalibration of the state's institutional foundations.

5 Conclusion

This chapter has used a quarter-century of electricity reforms to illuminate the changing nature of the Indian state. Since 1991, the state's morphology and activities have altered substantially in response to the perceived failures of the older state-dominated system. Over this time, the Indian power sector evolved into a hybrid public-private system, marked by a series of organizational innovations that combine elements of liberalization and dirigisme. Today private firms control the plurality of India's generation capacity, and on paper the sector's governing rules have taken a radical turn to emphasize market solutions and the discipline imposed by competition. At the same time, through organs like corporatized state-owned enterprises and new, nominally independent regulatory agencies, state activism has been both renewed and reinvented. In contradistinction to the deregulatory liberalization of the Anglo-American model, this chapter has labelled such a hybrid state-market combination *state capitalism 2.0*, emphasizing both the continued use of older forms of state activism across the purported "divide" of liberalization in 1991, their upgrading for the more liberalized economy, and the persistently close links between state and capital.

At the same time, the half-reformed power sector remains dysfunctional, suggesting that state capitalism and liberalization cannot simply be fused. Instead, they have been combined through an extended, ad hoc, and often painful process of institutional change, which has layered new and reinvented institutions atop the sediment of the pre-existing statist system. At least between 1991 and 2014, the resulting layered hybrid often tended to exacerbate rather than solve the power sector's predicament. The result has been a protracted internal crisis of control, characterized by both organizational proliferation—new agencies have emerged ad hoc while existing ones are rarely destroyed—and a corresponding proliferation of rents as different interest groups influenced different state agencies, tiers, and aspects of the power system. This internal incoherence helps to explain both the absence of a broad energy strategy before 2014, the sector's persistent financial and supply crisis, and finally the "policy paralysis" of the last years of the UPA administration regime—a low-grade crisis of legitimacy for the nascent system of state capitalism 2.0. This trajectory suggests that state capitalism 2.0 offers no simple alternative either to the old developmentalism or to the deregulatory mode of liberalization. As other large countries in the Global South attempt

to combine market discipline and administrative reform with renewed state activism, the difficulty of fusing these different logics is likely to become increasingly obvious in practice, even while such hybrids and their problems will take locally distinct forms.

Through such an analytic, this chapter also hopes to rejuvenate the study of public institutions in South Asia. While existing literature on state capacity concentrates on macro-level state autonomy from societal forces or micro-level bureaucratic quality, the analysis here suggests that the meso-level of state forms is also crucial. In India, a lack of state cohesion, or "an appropriate apportionment of *power* among state policy agencies" (Chibber 2002: 952, emphasis in original), has repeatedly undermined policy coherence. More than this, state-society relations are mediated through the structure of the state. Against analyses that attempt to distinguish state capacity ("the chain of command") from India's problematic relationship with society ("the chain of sovereignty"; Evans and Heller 2015), this chapter has shown that the state's organizational problem and its political problems are inextricably entwined. Paying careful attention to the layered dynamics of institutional change can help to explain the apparently contradictory or "Janus-faced" nature of the contemporary Indian state: at once business-friendly, populist, and often underperforming.

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