

Media Coverage, Industrial Policy, and Safety: Explaining Shifting State and Private Ownership in China's Coal-Mining Industry

by

Nicholas Martin

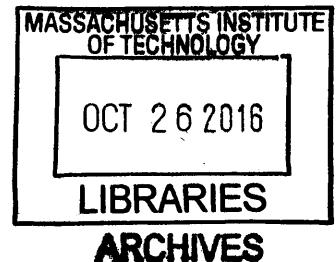
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Nicholas Martin

Submitted to the Department of Political Science on 1 August, 2016
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ABSTRACT

This thesis uses the case of large-scale, expropriatory nationalization of private coal mines to investigate the puzzle of uneven policy implementation in China. It casts new light on the role media coverage and public opinion play in the Chinese policy process, on the party-state's disciplinary (*wenze*) practices, and on the dynamics of China's state capitalism and the apparent "advance of state and retreat of private firms" (*Guo Jin, Min Tui*) in the late 2000s.

Despite being an authoritarian state, China often finds implementing policies that damage the interests of local political and business elites difficult. Decisions-making and implementation usually require extensive bargaining, and stasis often prevails. Yet occasionally dramatic change does occur. One particularly puzzling case is coal mining. Since the late-1990s central-state actors had sought to consolidate the industry under large state-owned enterprises (SOEs), and eliminate the substantial privately-owned mining sector. However, this clashed with the interests of owners and local officials, for whom the private mines were major providers of fiscal revenue and bribes. A major closure campaign by the Center in the late-1990s failed. Yet after 2007 – in the face of much conflict – several, though not all, of the major coal provinces forcibly nationalized most of the private mines, creating the SOE-dominated coal industries that local officials had previously resisted.

These different outcomes resulted from the interaction of varying accident patterns, uneven media coverage, and state disciplinary practices. Nationalization occurred only after the Chinese media began reporting extensively on mining accidents, and only in those provinces most under the media spotlight. Variation in coverage was driven by geologically-based variation in accident patterns. Intensive coverage turned accidents into "sudden incidents" (*tufa shijian*) perceived to threaten social stability and state legitimacy. This media-generated pressure was reinforced by the disciplinary apparatus, which was itself responsive to media coverage and accident patterns. A subset of coal provinces thus came under particularly intense political pressure to implement central policy and resolve the industry's safety problem, leading ultimately to nationalization.

Thesis Supervisor: Suzanne Berger

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Abbreviations

21 CBH	<i>Twenty-First Century Business Herald</i>
CCIYB	<i>China Coal Industry Yearbook</i>
CWSYB	<i>China Work Safety Yearbook</i>
CCP	Chinese Communist Party
CCTV	China Central Television
CYD	<i>China Youth Daily</i>
ECIDC	<i>Essentials of Coal Industry Development in China</i>
EO	<i>Economic Observer</i>
IEA	International Energy Agency
IMAR	Inner Mongolia Autonomous Region
NDRC	National Development and Reform Commission
PD	<i>People's Daily</i>
SACMS	State Agency for Coalmine Safety
SAWS	State Agency for Work Safety
SCMP	<i>South China Morning Post</i>
SCWSC	State Council Work Safety Commission
SOE	State-owned Enterprise
TVM	Township and Village Mine

Chapter 1

Introduction

1.1 Statement of the Research Puzzle

This dissertation explores the puzzle of uneven policy implementation in China: why the same policy is carried out zealously in some provinces or at some times, but incompletely or not at all in other provinces or at other times. Specifically, it explores the inconsistent implementation of a particular type of policy, which I call “rent-destroying policies”, namely those whose implementation threatens to reduce the economic or political (power) benefits that accrue to local political and economic elites under the status quo. Many of the big reforms that the Chinese government has carried out over the past 30 years (e.g. marketization, internationalization, privatization) were achieved essentially by creating new rent-seeking opportunities for local political elites, thus incentivizing them to carry out the desired changes (Heilmann 2008, Zweig 2002). However, since at least 2000 solving many of the country’s problems has required eliminating such rent flows – for instance, reducing fiscal extraction from farmers, cracking down on land appropriation, or closing polluting industrial capacity. The success with which such policies are implemented is of obvious substantive importance. Whether and under what circumstances the state can enact change even when it threatens the interests of powerful groups, matters.

This thesis approaches this question through a study of the central government’s efforts to restructure China’s coal industry. Until the end of the 2000s, the industry consisted of a state sector composed of mostly large state-owned enterprises (SOEs) owned by the provinces and the Center, and a substantial private sector composed mainly of small-scale mines, the so-called “township and village mines” (TVMs). While policy divisions existed at the Center about the preferred share of state and private ownership, since the mid-1990s the groups that controlled the formulation of the central government’s coal-industry policy have sought, in essence, to eliminate this small-scale and private sector, and consolidate the industry under large state firms.

Various reasons were advanced for this policy objective, ranging from industrial development and energy security to pollution control and work safety.¹ Yet this objective clashed fundamentally with the interests of private investors, local communities and, above all, with the interests of subprovincial (“local”) officials, for whom the private mines were a major provider of rents (bribes, extra-legal levies) and taxes. Having large provincial and central SOEs take over the private mines – as central policy called for – would destroy these rents and more generally damage the local economies, as the large SOEs usually paid little tax locally, were far less vulnerable to the extraction of bribes and extra-legal levies than private firms, and created fewer local jobs. Unsurprisingly, this policy therefore generated much resistance from local officials and communities across all of China’s coal regions.

¹This thesis does not evaluate the justifications advanced for consolidating and nationalizing the coal industry. Of interest here is that this policy amounted to destroying much of the rent flows local elites in the coal regions enjoyed; not whether this was “good” policy.

Outcomes varied over time and across provinces. In 1998 Premier Zhu Rongji and (then) Vice-Premier Wu Bangguo led a determined nation-wide campaign to close down the TVMs as a sector. But this failed as local governments faked mine closures and hid output (Wright 2007, Tu 2010). The campaign wound down after 2001, whereupon TVM production rapidly returned to pre-campaign levels, then exceeded them. Yet by 2012 substantial changes had been implemented, especially in two of the major mining provinces – Shanxi and Henan. In all of the ten main coal-producing provinces, which account for over 80% of China's output, provincial and local governments had by 2012 pushed through some mine consolidation. Figure 1.1 shows this graphically, by comparing the number of mines reported to be operating in each province at the earliest and the latest year in the 2000s for which data are available. Everywhere the number of mines fell, with the sharpest reductions occurring in Shanxi and Henan. These reductions in mine numbers were achieved almost entirely by reducing TVM numbers.

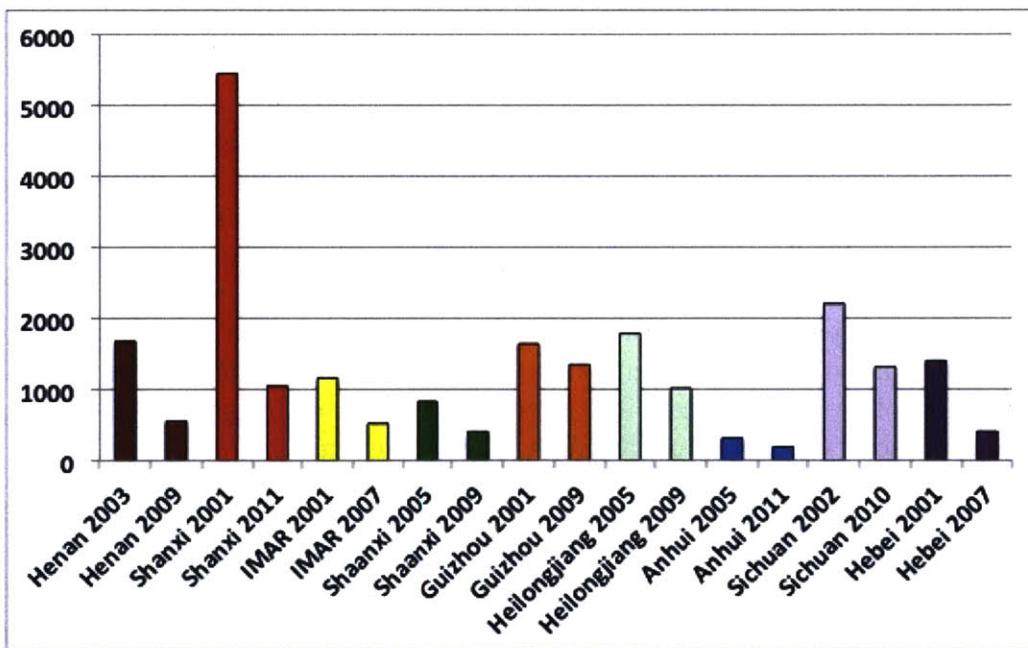


Figure 1.1: Number of Operating Mines in the Early or Mid- and the Late-2000s

Source: CCIYB 2001-2012

IMAR: Inner Mongolian Autonomous Region

These ostensibly similar changes to *industry structure* (consolidation) however reflected very different changes in *ownership structure*. Figure 1.2 provides information on this, by comparing reported output from state and TVM (private) mines in 2005 and 2011

for each province. In Shanxi and Henan significant private sectors existed in 2005, but by 2011 they had been all but eliminated (see black highlights in Figure). Conversely, in the Inner Mongolian Autonomous Region (IMAR), Shaanxi, Guizhou, Sichuan and Heilongjiang the large private sectors that existed in 2005 remained in place in 2011, or even expanded relative to the state sector. (In Shandong, Hebei and Anhui, TVMs were never significant.)

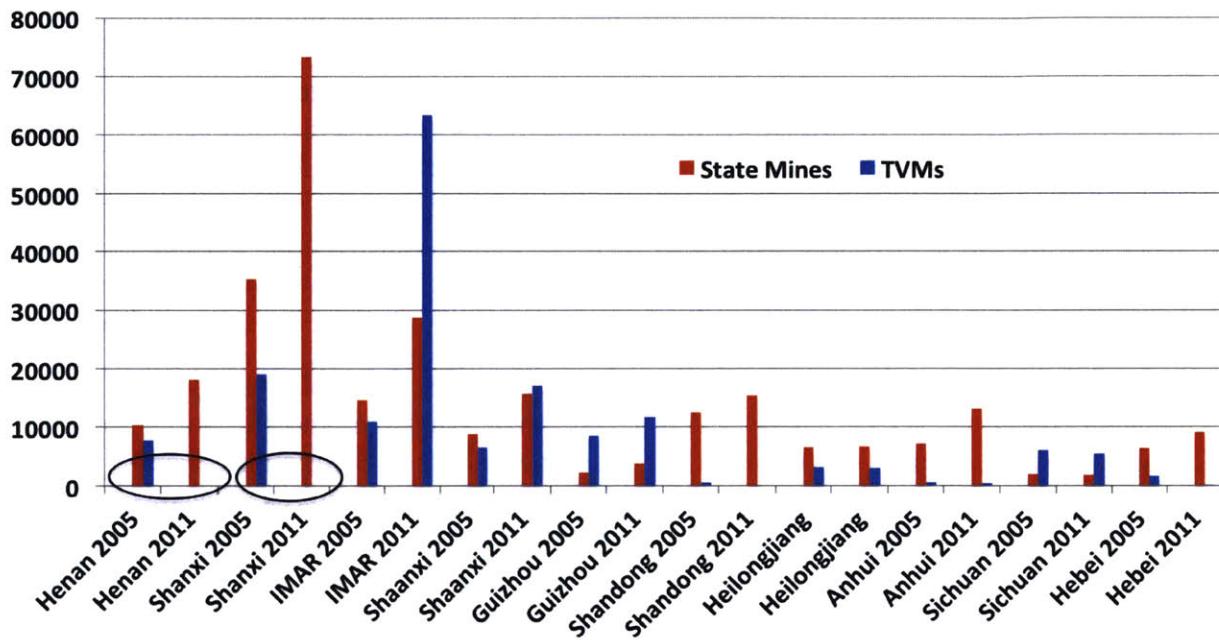


Figure 1.2: Reported Coal Output from State and Private Mines in 2005 and 2011

Source: CCIYB, 2001-2012

What occurred in Shanxi and Henan was forcible nationalization or closure: the private mines (TVMs) were taken over by large, mainly provincially-owned SOEs. This was precisely what central policy-makers had been calling for, but it was also a highly contested policy. Private investors from Zhejiang province alone claimed to have lost RMB 20 to 30 billion (US\$ 3.2 to 4.8 billion), local economies were damaged, local officials' access to rents collapsed, and a vituperative public debate arose about the “advance of the state and retreat of the private sector” (*Guo Jin Min Tui*, 国进民退). Conversely, the other provinces opted for policies that I term “local consolidation”; viz. encouraging the local private mines to undertake consolidation (mergers, take-overs, formation of business alliances) *among each other*. Here, there were virtually no cases of forcible sale of private mines to SOEs. Instead, the private sector – and thus local

officials' access to the rents it provided – was preserved. On every dimension, this was a much less conflictual approach, but it also fell short of what the dominant groups at the Center were pressing for.

While the level of “state capacity” that the Chinese state possesses continues to be debated², scholars generally agree that although not unheard of, implementing policies that sap the rents of local officials is something that China’s central government generally finds very difficult. The enactment of precisely such changes on a large scale in major provinces is thus a surprising and unusual outcome. The large-scale, simultaneous expropriation of many private businesses, too, is an unusual and unexpected development in China – a country generally thought to be very concerned to preserve strong economic growth and avoid incidents that could trigger wider social unrest. Why did Shanxi and Henan carry out the radical, rent-destroying changes that central-government policy makers were calling for (consolidation of the industry under large state firms and elimination of the private sector), even while the other provinces refrained from doing so? Moreover, why, even in Shanxi and Henan, were these changes enacted only in 2008–2010 – and not much earlier, given that the Center had been pressing for the closure or nationalization of the private coal sector since at least 1998?

This thesis argues that provinces’ varying policy choices are explained by how different, geologically-based accident patterns, uneven media coverage, and the party-state’s formal disciplinary practices interacted to place the leaders in Shanxi and Henan under far greater pressure over accidents than the leaders in other provinces. Because accidents were seen – with some justification – as tied to industry structure (with private mines suffering significantly more accidents than state mines), Shanxi and Henan *ultimately* opted for a much more radical policy choice than the other provinces, namely nationalization, in order to get accidents under control. Yet this was not their first choice. Like the other provinces, Shanxi and Henan, too, initially experimented with the more moderate (private sector-preserving) policy option of “local consolidation”, and only forced through nationalization after their initial policy responses to the mining-safety crisis had failed to stem the flood of large accidents in either of the two provinces. Conversely, in the other provinces, different accident patterns and the consequent lower levels of media coverage and less severe disciplinary sanctions made for lower political pressure over mining safety, and thus their leaderships had little appetite for forcing nationalization onto unwilling subprovincial governments, mine owners, and local communities.

The rest of this chapter is structured as follows. First, I review literatures on policy implementation and on policy variation in China, and show why they find it hard to explain this empirical variation. Then I lay out my research strategy and summarize the argument the thesis makes. I conclude with an outline of the rest of the thesis.

²For discussions and varying assessments of Chinese state capacity see *inter alia* Baum and Shevchenko 1999; Hu and Wang [1993] 2001; Naughton and Yang 2004; Naughton 2013; Wang 2003; Yang 2003, 2004.

1.2 Non-China and China Theories of Policy Implementation

As in many other areas of social-scientific inquiry, there has been only limited dialogue between debates about policy implementation within and without the China field. Instead, they have evolved mostly separately from each other, focused on different concerns. The non-China literature has tended to develop more general propositions about why policy implementation succeeds or fails, while the China literature has been overwhelmingly focused on analyzing the effects of specific and often rather unique features of the Chinese policy process and institutional structures. Hence I shall review them separately, though I will note points of direct engagement between the two bodies of work.

1.2.1 Non-China Theories of Policy Implementation³

Within the non-China literature on policy implementation two common approaches are, firstly, broadly Weberian arguments about bureaucratic structures, sometimes buttressed with cultural approaches to bureaucratic effectiveness and dedication, and secondly state-society approaches focused on the possibility for state-society synergies that can facilitate implementation.

1.2.1.1 Weberian Approaches: Bureaucratic Autonomy and Capture

One major approach draws on Weber's theories of bureaucracy to argue that policy implementation is more likely to succeed when the state agencies charged with carrying out policy approximate the characteristics Weber ascribed to a rationalized modern bureaucracy. These are (1) that officials are organized hierarchically, with lower offices controlled and supervised by higher offices, making them responsive to the instructions of superiors; (2) that officials have clear responsibilities; (3) that relations between them are governed by written regulations; (4) that they are appointed and assessed on the basis of technical qualifications (merit), ensuring a minimal level of competency; and (5) that their incomes derive mainly from fixed salaries and pensions paid by the state – as opposed to outside earnings or office-based rent-collection – and that they are protected from arbitrary dismissal, usually with tenure for life, to ensure their dedication to the state's laws and policies (Kiser and Schneider 1993: p. 188).

Weber argued that such a bureaucracy was functionally superior to other forms of social organization. For instance, he explained the fiscal superiority of early-modern Prussia with its early development of a rational-modern bureaucracy (Kiser and Schneider

³This section is indebted to the very useful overview in Amengual 2011: pp. 8, 13–17

1993). Later generations of scholars have taken up these ideas of Weber's to explain variation in effective policy implementation, while also adding to the above list of characteristics of effective bureaucracies by noting the importance that state agencies be adequately resourced to carry out their policy tasks (e.g. McAllister 2010: p. 8–9; Economy 2004; Amengual 2011: pp. 17–19), or drawing attention to the cultural sources of bureaucratic cohesion and effectiveness, such as systematic socialization into shared norms (Di Lulio 1994, Kaufman [1960] 2006).

The essential idea of much of this writing is that the above characteristics ensure that the state's bureaucracy possesses the necessary levels of technical competence and capacity to formulate and carry out policy, while being sufficiently insulated or “autonomous” from the demands of societal interests (e.g., business, labor) or political groupings (e.g., parties) to carry out policy, also “over the actual or potential opposition of powerful social groups or in the face of recalcitrant socio-economic circumstances” (Skocpol 1985: p. 9). Conversely, where the bureaucracy is insufficiently Weberian – in particular, insufficiently insulated from the pressures of societal or party-political interests – implementation is likely to fall short when policy conflicts with these interests. Under these circumstances, societal or party-political interests are liable to “capture” the bureaucracy, leading to policy distortion. Thus, Geddes (1990) argues for Brazil that effective policy implementation depended on achieving high levels of bureaucratic insulation from “customary political patronage networks” based around parties and elected congressmen. Similarly, Evans (1995) and Kohli (2004) emphasize the importance of bureaucratic autonomy from business interests for states to be able to carry out effective development policies, and Rauch and Evans (1999) find a strong link between successful industrial development and a measure of the “Weberianness” of the bureaucracy (meritocratic recruitment and rewarding long-term career prospects) that they construct. Henderson et al. (2003) demonstrate the same link for poverty alleviation. Writing about environmental law-enforcement in Brazil, the most effective enforcement institutions McAllister (2008, 2010) describes exhibit broadly Weberian characteristics such as merit-based recruitment, competitive salaries, long-term career prospects and systematic socialization into the organization.

Much of the literature on local government in China engages with issues related to the above literature's concerns. On one level, local and provincial governments in China fairly closely approximate a Weberian bureaucracy with, at least formally, meritocratic hiring and assessment⁴, life tenure, attractive pensions and benefits, and clear authority

⁴There is strong evidence that the state's hiring and evaluation processes are deeply corrupted, especially at the local level. Crucially though, there is no evidence and no reason to think that there is much difference in this regard across the country. Writing about Anhui, a mid-income province in central China, Smith (2009, 2013) comes to many of the same conclusions about the role of bribes and patronage in hiring decisions and falsification and collusion in cadre evaluation as Hillman (2014) does for an (unidentified) poor province in southwest China. Specifically with regard to cadre evaluation, Heilmann and Melton (2013) make many of the same points for rich Guangdong. As we will see in Chapter 4, corruption and rent-seeking were rife in all of the coal provinces.

relations based on written rules. The Chinese Communist Party (CCP) also takes great care to socialize and spiritually and culturally mold its officials through its nationwide system of party schools (Pieke 2009, Shambaugh 2008: pp. 103–160, Smith 2015). In particular, care is taken to orient leading provincial officials towards the Center by rotating them through different provincial and central postings, and enforcing term and age limits (Li 2004). I am not aware of any data indicating the existence of systematic inter-provincial variation in this regard, let alone variation that could explain specifically our puzzle. As will be discussed in more detail below, in all the provinces that I have studied, the coal industry was regulated – and industry restructuring carried out – through basically the same bureaucratic structures.

On another level, however, China is very far from possessing an ideal-typical Weberian bureaucracy, *where officials' incomes derive mainly from fixed salaries and not outside earnings or office-based rent-collection*. Rather, much evidence suggests that corruption and rent-seeking are rife in Chinese administration at all levels. China scholars have often explained local officials' reluctance or outright refusal to implement policy with official rent-seeking and excessively close business-government ties (*inter alia*, *China Labor Bulletin* 2008; Economy 2004; Li 2003; Lü 2000; Pei 2006; Smith 2009, 2013; Wang 2013; Wright 2007; Yang 2009). Might this explain our puzzle? To do so, we would need to establish the existence of *varying* levels of corruption and/or capture in different provinces. Given the absence of systematic data on inter-provincial levels of corruption or capture (and the extreme difficulty of collecting such data), this explanation cannot be excluded categorically. However, my research found no evidence to suggest that there was salient variation in the level of corruption between the examined provinces, or that some local or provincial administrations had been “captured” by the mine owners (or some other interest group) while others had not, and that whether or not provinces nationalized their coal industries was somehow tied to this - hypothetical - variation. On the contrary, there is reason to believe that there were *no* salient differences between the provinces in this regard.

The opportunities for rent extraction (bribes, quasi-fiscal levies, covert shareholding, etc.) that the private coal mines provided are fundamental for explaining why local officials generally opposed nationalization. But as Chapter 4 shows, coal-related corruption and rent extraction seems to have been extensive in *all* of the coal provinces I studied. Indeed, Shanxi – the province that first began enforcing large-scale nationalization of private mines – was among the regions hardest hit by Xi Jinping’s anti-corruption crusade. Even the CCP described what happened in Shanxi during the coal boom of the 2000s as a “systematic, landslide-style [collapse into] corruption” (系统性、塌方式腐败) (*Shanxi Daily* 2014a). While leadership infighting probably contributed to the intensity of the crackdown on corruption in Shanxi⁵, the extent of the corruption uncovered there makes it very unlikely that Shanxi’s enforcement of nationalization – which

⁵Shanxi was the home province and apparently power base of Ling Jihua (令计划), one of the leaders of the Youth League faction whom Xi Jinping chose to eliminate after 2012.

occurred long before Xi’s crackdown – can be explained with the Shanxi administration having been *less* corrupt than other provincial governments.

I have also found no evidence to suggest that the puzzle might be explained by policy makers in some provinces, but not in others, having been “captured” by coalmine owners (or some other interest group). Government capture is by definition a secretive phenomenon, and China’s policy process is hard to penetrate. The many fatal accidents, extensive corruption, and the public outcry over nationalization moreover made coal policy especially sensitive, and information hard to come by. Thus it cannot be precluded that capture did in fact happen, and I simply failed to find the evidence. However, there are a number of reasons which speak against this, and suggest that capture does not explain our puzzle.

In all provinces, the private coal sector was made up of mostly small-scale companies. Elsewhere, small companies generally depend on business associations (or some other form of organization) to influence policy, yet in China business associations are mostly weak, state-controlled entities (Dickson 2003, 2008; Tsai 2007). The only instance I came across where a business association played a role of any kind in the provincial coal-industry consolidations was in Shanxi, and far from having “captured” the Shanxi government it proved unable to exercise any meaningful influence on provincial policy.⁶ As Chapter 4 shows, in all coal provinces the mass of small-scale private coalmining companies seems to have been quite helpless and quiescent in the face of even county – let alone provincial – government power. Indeed, local officials’ eagerness to preserve the private sector was due to the relative powerlessness of the private mines, as this enabled them to collect rents from them. In most coal provinces there also existed a small number of much larger private firms, owned by some of the wealthiest citizens of these provinces. These firms and individuals almost certainly enjoyed strong relations with key local, provincial, and possibly even national officials. However, nothing I am aware of suggests that they sought to use such connections for anything more than to protect *themselves* and *their own* mines.

If not private coalmine owners, might capture by some other interest group explain provincial policies? The most obvious candidates are the large provincial coal SOEs or the local governments, since these were the two groups beside the private owners most affected by nationalization. Both of these groups must certainly have enjoyed significant access to provincial decision makers, and will likely have been fairly closely involved and consulted over provincial coal policy. Yet again I found little evidence to suggest that the different provincial policy outcomes can be understood as the result of provincial administrations having been “captured” by either of these constituencies.

As regards the SOEs, Tim Wright (2000a, 2007) has shown that especially during market downturns, strong competition existed between state and private coal firms.

⁶This was an association of Zhejiang businessmen. The case is discussed further in Chapter 5.

The SOEs are unlikely to have mourned the disappearance of their private competitors – but that does not mean that they wished *to take them over themselves* (which is what nationalization meant in practice). As we will see in Chapters 4 and 5, the SOEs appear to have often been less than enthusiastic about having to take over the privates, because this placed substantial burdens on them: While some of the mines they got were of high quality (large reserves of valuable coals, advanced equipment) they were also obliged to take over many poor quality mines. They now became responsible for these mines' safety performance and had to pour substantial financial and managerial resources into upgrading and enlarging them. If provincial policy in Shanxi and Henan had been primarily aimed at benefiting the SOEs (as the notion of "capture" suggests), then helping them to acquire new, untapped coal reserves in northwestern China would probably have been a better approach than having them take over the local private mines.⁷

As regards the local governments, the basic objection to "capture" as an explanation for our puzzle is a different one. Provincial leaders depend on local leaders and their administrations for the reliable execution of day to day governance and the attainment of basic regime goals (social stability, fiscal income, economic development). From this perspective, what needs to be explained is not so much why leaders in most provinces should have been reluctant to force through a policy (nationalization) likely to evoke serious dissatisfaction among the local governments. It is rather why a subset of provinces (Shanxi, Henan) ultimately did enforce this, even over massive objections and resistance from local officials. Put another way, "capture" of provincial governance by the local authorities should be the ordinary, expected outcome, something indicated also by the many studies showing how difficult it is for the Chinese state to implement policies that sap local officials' rents.

1.2.1.2 Non-Weberian Arguments about Implementation: State-Society Synergies

Another group of arguments common in the non-China literature qualifies the foregoing works' concern with insulating state bureaucracies from social pressure groups. Researchers have increasingly suggested that insulation in and of itself may be neither sufficient nor even desirable under all circumstances. Non-state actors can play crucial roles in policy implementation and contribute to superior social, environmental and economic outcomes by supplying state agencies with additional technical resources, information, monitoring capacity and political support. Thus Peter Evans (1995) argued

⁷Indeed the personal assistant to the head of one major Shanxi SOE complained vociferously to me about the province having foisted the nationalization policy on the firm, when it would be better for the company to acquire new untapped coal fields outside of Shanxi (Interview 87), and it appears that Henan's nationalization policy also interfered with such efforts on the part of major Henan SOEs (*EO* 2011).

that “embeddedness” with the relevant societal stakeholders is crucial for the state to obtain relevant resources, especially information: autonomy (insulation) alone is not enough. Later authors have taken this insight further. Studying the implementation of environmental and labor standards in Argentina, Matthew Amengual argues that strong links to social organizations and firms can shore up implementation even in weak states. Weak, under-resourced agencies with strong links to social organizations performed better than stronger, better resourced agencies with few linkages (Amengual 2013, 2014). Similarly, Dara O’Rourke (2004) shows that in Vietnam, community pressure and community involvement was crucial for getting environmental law formally on the books actually implemented. By itself, the environmental protection agency was too weak to accomplish this in the face of resistance from local economic and political interests.

These arguments appear to have only limited purchase on our puzzle of regional divergence in the implementation of coal-industry restructuring. There is no evidence that the provinces which ultimately nationalized coal mining possessed close links to some sort of hypothetical pro-nationalization coalition of non-state forces, while provinces which did not nationalize lacked such links. On the contrary, both in Shanxi and Henan nationalization ran into massive resistance from local officials and mine owners, and sparked a nationwide media outcry about “the advance of the state at the expense of the private sector”.

While I argue that media coverage of mining accidents was crucial to getting provinces to implement nationalization, this is not a case of *linkages* between state and non-state actors promoting implementation.⁸ As discussed in Chapter 3, while the state obviously permitted coverage of mining accidents – at least up to a point – there is no strong evidence that the authorities sought to *instigate* such coverage (e.g. as a way of pressuring local governments), nor for strong links and coordination between media outlets and state actors responsible for coal policy. On the contrary, state authorities were worried about the potential of aggressive, sensationalist reporting on accidents to stir popular outrage, and took measures to try to limit such coverage. Indeed, the State Work Safety Agency and the State Council Work Safety Commission – the two state institutions which one might expect to most favor critical coverage of accidents – emerge as particularly concerned about critical media coverage. Furthermore, the markedly uneven nature of the coverage – accidents in Shanxi, in particular, received vastly more coverage than accidents elsewhere, even though Shanxi’s safety performance

⁸Although most of China’s media outlets are ultimately state-owned, in the context of the present discussion it is legitimate to treat the commercial media (市场媒体), at least, as more akin to non-state than state actors. As discussed in Chapter 3, unlike the traditional party papers (党报) they are subject to market pressures (leading them to pursue controversial or critical stories in order to attract readers) and especially at the top commercial outlets, a significant number of journalists appear to understand themselves as “advocacy professionals” with a mission to support victims of abuses, act as watchdogs, and “speak truth to power” (Hassid 2011).

was better than that of many other provinces – is hard to explain in terms of cooperation between state and media actors.

While the secrecy of the Chinese propaganda and censorship system means that cooperation and coordination between state and media actors might have been more significant than indicated here, the evidence I found suggests that coverage was mainly a consequence of the media's own interest in selling copy by covering scandalous and somewhat inflammatory events, with the disproportionate focus on a subset of provinces (above all Shanxi) a result of relative accident size and geographical accessibility.

1.2.2 Arguments about Policy Implementation from the China Literature

China studies of a wide range of policy areas have revealed highly diverse outcomes. Many studies found that at the local level central-state policies often went unimplementation or were seriously distorted, especially if they conflicted with maximizing economic growth, revenue and rent generation. This was true of environmental policy (Economy 2004, Jing 2003, Wang 2013), efforts to reduce tax burdens on farmers (Bernstein and Lü 2003, Li 2003, Li and O'Brien 1999, Chen and Wu [2004] 2006), preserve agricultural land (Mei 2009; Yew 2011, 2012) or restructure industries like coal, steel or oil (Lin 2008, Mei and Pearson 2014, Pei 2007, Taube and in der Heiden 2008, Wright 2007, Zheng and Abrami 2011). Work-place safety (Wright 2004, CLB 2008) and food and drug safety regulation (Yang 2009), too, often went unimplemented. But other studies found notable implementational successes, even when policies inflicted severe costs on local officials, for instance inflation control (Huang 1996, Shih 2008), tax reforms (Yang 2004), energy-efficiency improvements (Heilmann and Melton 2013)⁹, the recentralization of the oil and petrochemicals industries (Lin 2008), and ultimately also the cancellation of most taxes and fees levied on peasants (Göbel 2011, Kennedy 2007).

Four approaches to explaining variation in policy implementation can be found in the China literature; viz. China-specific arguments about bureaucratic structure; provincial leaders' relation to the Center; economic change; and the cadre evaluation system.

1.2.2.1 Bureaucratic Structure

China scholars have long emphasized the effects of China's bureaucratic structure for explaining policy outcomes. The most important perspective in this regard is that of "fragmented authoritarianism", which argues that the functional and territorial segmentation of China's bureaucracy and the proliferation of veto points produces a policy

⁹In how far the ambitious energy-efficiency goals set in 2006 were achieved is disputed. For contrasting views see Heilmann and Melton (2013), Wang (2013) and Naughton (2013).

process marked by incessant bargaining between bureaucratic interests. Central policy becomes increasingly malleable as it percolates downwards and the parochial interests of the agencies and regions charged with implementation are incorporated into policy (Lieberthal and Ocksenberg 1988, Lampton and Lieberthal 1992, Mertha 2008). However, while the fragmented-authoritarianism perspective helps explain the general tendency for central policies to be distorted or go unimplemented, it cannot explain regional *variation* in implementation. This is because, firstly, the fragmentation of formal structures of bureaucratic authority that Lieberthal et al. point to are relatively invariant nationally (the rank and mission of bureaus mostly being regulated centrally), and secondly, because this perspective tends to underplay the powerful levers of Leninist control that the Chinese system also possesses. In particular, it disregards the hierarchical personnel control, which gives higher levels tremendous power over lower levels (Naughton and Yang 2004: pp. 9–10; Heilmann 2005).

Both of these factors were at play in coal-industry restructuring. Formal bureaucratic structures seem to have been the same across the country. Everyday regulatory oversight over private mines was exercised primarily through county and municipal coal-industry, work-safety and environmental protection bureaus (煤炭局、煤炭工业局, 安全生产监督管理局, 环境保护局) as well as the local Development and Reform Commissions (发展改革委员会), which in turn were supervised by the local government and their provincial-level equivalents. Meanwhile, in all provinces I studied, the large-scale coal mining consolidation campaigns – including both the campaigns to nationalize the industry in Shanxi and Henan, and those to implement “local consolidation” in the other provinces – were conducted through top-down mobilization of the municipal and county governments by the province. At each level, a Leading Small Group (领导小组, LSG) was formed, which brought together all relevant bureaus (Coal Bureau, Safety Bureau, Development and Reform Commission, etc.) and was headed by the provincial governor or deputy governor at the provincial level and by the mayor or county head at the local levels. The LSG then put together the local consolidation plan (whether for nationalization or “local consolidation”), submitted this plan to the next-higher level LSG for approval, and enforced its local implementation.

Inter-bureaucratic bargaining and implementation failures of the kind predicted by the fragmented-authoritarianism perspective certainly occurred during coal consolidation, as county and municipal LSGs bargained with the provincial LSG to try to maximize the number of mines they would be permitted to preserve, or connived in mine mergers that were more nominal than real (cf. Chapters 4 and 5). However, since the formal authority of provincial over municipal and county government is the same everywhere in China, this does not explain why some provinces forced much harsher settlements on their local governments than other provinces.

The sole aspect of bureaucratic structure known to me wherein the examined coal provinces really did differ was SOE ownership. As Eric Thun (2004: pp. 172–204) has shown, whether a province or municipality owns SOEs of its own, or whether the

state firms active in some given industry in the province/municipality are owned by the central government (or by other provinces), can have significant consequences for provincial/municipal incentives and abilities to manage that industry. In the case of coal, Inner Mongolia is unique among Chinese coal provinces in that it has no coal SOEs of its own. Its substantial state coal sector is composed entirely of SOEs that are centrally-owned or owned by other provinces. As discussed in Chapter 5, this may well have further diminished IMAR's zeal for nationalizing its coal industry. However, in turn IMAR's distinctiveness means that it cannot explain our puzzle, since other provinces that had coal SOEs of their own (e.g. Shaanxi, Guizhou) also did not nationalize their coal industry.

1.2.2.2 Provincial Leaders' Relation to the Center

Another view explains inconsistent policy implementation with variation in provincial leaders' relationships to the Center. Arguments about this variable's effects vary considerably. Huang (1996) claims that leaders with close relations to the Center are more faithful policy implementers than those with distant relations. Thun and Segal (2001: p. 579f.) make a similar claim. But Shih (2008) suggests that provincial leaders with ties to central leaders from "generalist" factions (those whose members are recruited mainly from provincial and local government) enjoy *greater* scope to *avoid* onerous policy requirements, while provincial executives from "technocratic" factions (those whose members are mainly based in central-government ministries) will be more faithful implementers. Chung (2000) and Heilmann (2008) claim that subnational leaders are more likely to pioneer risky policy experiments if they have close relations to central leaders who will protect them in case of failure. Another possibility could be that divisions at the Center about coal policy might map onto provincial factional alignments, with provinces close to advocates of nationalization at the Center nationalizing, and those close to opponents of nationalization refraining from doing so. It is also conceivable that provinces came under unequal levels of pressure from the Center because of the varying strategic significance of their coal industries.

To explore these hypotheses, it is worth looking at three neighboring North-Western provinces; Shanxi, Shaanxi and Inner Mongolia Autonomous Regions (IMAR). They are China's three most important coal-mining regions, producing about 58% of total coal output. Yet their coal-industry policies diverged sharply, with Shanxi pioneering radical nationalization policies while in Shaanxi and IMAR large private sectors remained in place. This suggests that the strategic significance of coal resources was not the determining factor.

What about factional alignments? Analysts of elite politics have argued that Chinese politics in the 2000s and early 2010s was structured around competition between Hu Jintao's "Youth League" faction and Jiang Zemin's "Shanghai Gang". In the key period

of 2005 to 2012 the leaders of all three provinces were closely aligned with Hu Jintao's "Youth League" faction.¹⁰ In short, their leaders seem to have had relatively similar relations to the Center, suggesting that the particular policy choice of interest to us (nationalization) was not determined by provincial leaders' membership in elite factions. In as far as the Youth League is, in Shih's terms, a "generalist" faction and Shanxi arguably the province with the closest Youth League ties, that should have given it the greatest scope to *avoid* implementing central policies. Yet Shanxi carried out the most drastic industry restructuring, that was most faithful to central objectives. While all three provinces' leaderships' close ties to the dominant central faction should, according to Chung and Heilmann, have made it easier for them to carry out bold experiments, this does not explain why they ultimately carried out policies that, bold nor timid, were quite different from each other.

What about other divisions within the leadership? In Chapter 2 we will see that the roles of state and private ownership in coal and other strategic industries remained a contested topic at the Center. While the dominant position advocated nationalization, a minority position pressed for preserving a space for private ownership. Yet again these divisions do not appear to provide a good explanation for provincial policy choices, because few strong links between provincial policy makers and advocates of different positions at the Center are discernible that would appear to match provincial policy choices.

At the Center, the National Development and Reform Commission's energy departments, the National Energy Administration, the State Administration for Work Safety (SAWS), and the State Assets Commission appear to have been the bureaucracies most in favor of increasing state ownership and control of coal mining, and among Politburo Standing Committee members, Wu Bangguo and Xi Jinping seem to have supported this, while Li Keqiang and possibly Wen Jiabao appear to have been more skeptical (cf. Chapters 2 and 5).

The provincial leaders under whom nationalization occurred were Zhang Baoshun, Meng Xuenong, and Wang Jun (王君) in Shanxi, and Lu Zhangong (卢展工) and Guo Gengmao (郭庚茂) in Henan. Among these, only Wang Jun had strong ties to any of the above-mentioned bureaucracies.¹¹ Moreover, as we will see in Chapter 5, the move to

¹⁰Shanxi's party secretaries from 2005 to 2014 were Zhang Baoshun (张宝顺, 2005–2010) and Yuan Chunqing (袁纯清, 2010–2014), both of whom made their career in the Communist Youth League, which is considered the core base of Hu Jintao's faction. The Shanxi governor in 2007–2008, Meng Xuenong (孟学农), under whom the nationalization plans were developed, was also a Youth League cadre. Shanxi was also the home province of Hu's chief of staff, Ling Jihua. In Inner Mongolia, the party secretary from 2009 to 2012, Hu Chunhua (胡春华), was a former Youth League cadre considered very close to Hu Jintao, and the IMAR governors since 2003 Yang Jing (杨晶) and Bagatur (巴特尔), too, are former Youth League leaders. Finally, the Shaanxi governor from 2006 to 2010 was the above-mentioned Yuan Chunqing, and his replacement as governor (2010 to 2012) and current Shaanxi party secretary (since 2012), Zhao Zhengyong (赵正永), too, is a former Youth League leader.

¹¹Immediately prior to becoming governor of Shanxi he had been the head of SAWS. Earlier in his career he had served as the vice-minister in the Ministry for the Coal Industry (from which SAWS

wards nationalization in Shanxi predated Wang's arrival, having already begun under Meng, and in fact upon his appointment, Wang did *not* immediately continue Meng's nationalization policy. Rather, during the first six months of Wang's tenure, he allowed the nationalization drive to become bogged down. As regards ties to top leaders, decision makers in Shanxi and Henan are more likely to have been close to Li Keqiang and Wen Jiabao than to Xi and Wu, since like most Shanxi leaders Li belonged to the Youth League, and had served as governor and party secretary of Henan from 1999 to 2004.

Divisions at the Center of course are likely to facilitate selective policy implementation by subnational authorities in general, but the puzzle here is not so much that provinces should have sought to avoid implementing onerous policies, than why some provinces ultimately chose to adopt these policies, while others did not. By themselves, the central divisions to do not explain these diverging provincial policy choices.

1.2.2.3 Economic Change

Scholars have also pointed to secular economic change as an explanation for varying policy outcomes. If economic change erodes the rents that some business or institutional arrangement is creating for local officials, resistance to central policies seeking to alter this arrangement may also decline. For example, Lin (2008) and Yang (2004) explain the Center's ability to force local governments and the military to divest themselves of (formerly) lucrative companies with the rent-eroding effects of the mid-1990s deflation, and attribute the *failure* of earlier attempts to force divestment to the fact that before deflation set in, these businesses were still generating rents. Wedeman (2003) makes a similar argument to explain the completion of national product markets in the 1980s and 1990s.

The coincidence of the Financial Crisis with coal nationalization lends this idea plausibility. Chinese officials sometimes claimed that by suppressing demand the Crisis had provided an opportunity for coal-industry reorganization (e.g. Ji 2010) and Western scholars, too, have sometimes speculated about a link (e.g. Yang and Jiang 2012). But in fact nationalization began in Shanxi in spring 2008, when coal prices were still very high, bogged down in fall and winter 2008 due to local resistance – while coal prices were collapsing due to the Crisis – and resumed in spring and summer 2009, when prices were rapidly recovering. By the time Henan implemented nationalization in 2010, prices were again very high. Mine owners and local officials in Shanxi and Henan at all times

would subsequently be created) and had worked for 26 years in one of the largest Shanxi coal-mining SOEs, the Datong Coal Mine Group. Conversely, Zhang, Meng, Zhan and Geng had not worked in any of the above-mentioned bureaucracies, but had advanced their careers largely through postings in the Communist Youth League, local and provincial government, or state media organizations. Information about career paths was retrieved from the China Vitae database (<http://www.chinavitae.com/>).

were intensely opposed to nationalization, and there is no sign that the temporary price collapse changed this.

1.2.2.4 The Cadre Evaluation System (CES)

The Chinese policy process sometimes involves converting policy goals into precise quantitative targets on whose implementation lower-level officials are evaluated, and links their promotional prospects to this evaluation. Much discussion of policy implementation has focused on the effects of this system. Some scholars believe that the CES provides the state with a relatively effective tool to ensure that local officials comply with state policies (e.g. Edin 2003, Ong 2012, Whiting 2001, 2004). But others argue that the CES leads to systematic distortions in policy implementation and that it is open to considerable manipulation by local governments, who often have more incentive to collude in falsification than to monitor each other (O'Brien and Li 1999; Smith 2009, 2013, Gao 2010, Heilmann and Melton 2013, Wang 2013). These debates continue, but with regard to our puzzle the CES provides no answer.

Arguments about the CES mostly focus on its effects on *sub-provincial* government behavior. While CES-style targets are sometimes given to provinces, provinces were not given targets for expanding the industry share of the state coal mines. National coal-industry policy *did* consistently call for expanding the state coal mines' industry share, but this remained a strategic objective without precise targets or deadlines. Targets were given to provinces for reducing output from small mines and for mining safety, but neither of these seem to explain our puzzle, either.

Targets for Small-Mine Reduction

In 2007 the Center gave provinces quantitative targets for reducing the number of and output from “small mines” (defined as those with 300,000 tons output or less), to be achieved by 2010 (NDRC 2007). This mainly affected private mines because the private and the small-scale sector were largely coterminous (cf. Chapter 2). Yet it was left up to the provinces to decide *how* to bring about small-mine reduction – whether through closure, mergers *among* small mines, takeovers by state firms, or “expansion and upgrading” (enlarging the small mines so they would no longer be “small”) – and provinces opted for very different choices, with Shanxi and Henan opting for forcible nationalization, while other major coal provinces encouraged private firms to merge *among each other* (“local consolidation”) or expand their operations. Provinces seem to have gone about this with different levels of zeal. While Shanxi and Henan had been permitted, as per target, to retain 1100 and 500 small mines respectively, they eliminated all of them. Conversely, in 2013 and 2014 the Center was still giving Shaanxi and Guizhou new targets for small-mine elimination, even while Shanxi and Henan were being congratulated on “having basically completed the elimination of backward small

mines” (基本完成淘汰落后小煤矿任务) (State Energy Bureau 2013, 2014). In other words, these targets do not explain the variation observed. Rather, to the extent that the industry restructuring that occurred from 2005 to 2012 can be understood as provincial implementation of these targets, it *created* the variation this thesis seeks to explain.

Safety Targets

In 2004 the Center began giving provinces targets for improving mining safety. The question is whether *this* could have put so much pressure on provinces that they ultimately opted to simply eliminate the private sector (where the accidents were indeed concentrated) as a way of getting mining safety under control. While this thesis argues that rising pressure over mining accidents is central to explaining why some provinces nationalized the industry and others did not, there are several reasons to doubt that this pressure came about mainly as a result of the inclusion of safety targets in the CES.

This is discussed in detail in Chapter 3. The evidence presented there concludes, firstly, that no obvious pattern tying nationalization/private-sector preservation to target achievement emerges. Indeed, Shanxi seems to have performed quite well on the safety targets. Secondly, research on the CES suggests that its capacity to shape officials’ behavior is quite limited, and that it especially struggles to incentivize them to take actions that would do short- or medium-term damage to their economies. The reasons for this are as follows. While the CES does allow a crude priority ranking of different targets, it contains no mechanism for adjudicating between competing targets receiving the highest level of priority (“veto targets”). Safety was given veto-target status, but closing or nationalizing private mines also clashed directly with three other objectives that, the literature has found, both the CES and more informal political norms have very consistently emphasized as of overriding importance for promotion: fiscal revenue, economic growth, and social stability. That is to say, even if achieving CES priority targets matters for career advancement – something about which the evidence is ambiguous – by itself this tells us little about how cadres prioritize competing priority targets. Indeed, there is suggestive evidence that other things equal, they will usually prioritize tax-revenue and growth targets, even at the cost of missing other targets. Finally, the evidence that performance on the CES really does have a material impact on cadres’ careers is quite shaky. In particular, it seems to almost never function as a sanctioning mechanism (i.e., poor performance may preclude cadres from gaining certain benefits, but it will not make them *worse off*.) (For further discussion and substantiation of these claims see Chapter 3.)

1.2.3 Other Explanations for Provincial Policy Variation in China: Policy Communities and Historical Legacies

Moving beyond the implementation literature, China scholars have pointed to several further factors as providing explanations for why provinces choose different policies in response to common challenges. Thun (2006) and Donaldson (2011) have explained diverging provincial development strategies with the existence of local policy communities that hold distinct beliefs and are accustomed to using particular policy approaches, relating these to formative leaders' beliefs (Donaldson) or institutional legacies from the planned economy (Thun). Hurst (2004) has pointed to divergent patterns of industrialization that left provinces with diverse industrial and thus interest structures, as explanation for varied responses to common problems. As these kinds of context-specific arguments must be assessed with reference to specific cases, I here consider whether they might explain coal-industry development in the five provinces were selected for case study: Shanxi and Henan (which both nationalized), and Shaanxi, IMAR and Guizhou (which did not).

Historical Legacies. One possibility is that provinces which possessed large coal SOEs of their own sought to strengthen these by giving them new coal reserves by expropriating privates, and this conditioned provincial policy. Yet Shanxi, Henan, Shaanxi and Guizhou *all* had large provincially-owned state coal sectors, with similar development histories and problems¹², and in the 2000s *all* four sought to strengthen their SOEs by merging them *among each other*, looking to these firms to serve as potential “provincial champions” to drive industrial development. Yet only Shanxi and Henan nationalized the private sector. Moreover, as was noted above, if strengthening the provincial SOEs was the primary objective, this could have been done in other, less conflictual and arguably more effective ways than through forcible nationalization of private mines. In the late 1990s IMAR privatized *all* its provincial and local coal SOEs, and the absence of a locally-owned state coal sector may help explain why IMAR did not nationalize the local private firms, as this would likely have meant outside, non-IMAR SOEs acquiring an even larger stake locally. But IMAR’s particular circumstances cannot explain the policy divergence between the other four.

Provincial Policy Communities. Might the diversity I seek to explain result from provincial policy communities accustomed to distinct state- or market-oriented approaches, as Thun (2006) and Huang (2008) argue existed in Shanghai and Guangdong? There is little evidence either way for Henan, but for Shanxi, Guizhou and Shaanxi there is clear evidence – to the contrary. A state-oriented policy community might be expected

¹²In all four provinces, the state coal sector was dominated by big SOEs created between the 1920s and 1970s. Until 1998 they were owned by the Center; that year, ownership of all but two was given to the provinces. By the 1990s most of these firms were struggling with legacy social costs, competition from privates, and sometimes exhausted deposits, though the very high coal prices in the 2000s partially alleviated these problems.

in Shanxi, since, like Shanghai, it was a center of the planned economy with a legacy of state-owned industrialization stretching back to the 1920s, and had been a CCP base area during the 1930s and 1940s and the party retained deep roots in the region (Goodman 1999, 2001). That Shanxi pioneered coal nationalization would fit this hypothesis. Yet in fact we will see in Chapters 4 and 5 that Shanxi's coal policy made several U-turns in the 2000s, suggesting that nationalization was not inevitable. The province's initial response to pressure for coal-industry restructuring in the early and mid-2000s was the same as the policies adopted in the non-nationalizing provinces Shaanxi, Guizhou and IMAR – “local consolidation” within the private sector. Indeed, from 2004 to 2007, Shanxi carried out a major policy initiative to clarify and *strengthen* the property rights of private miners, with the explicit objective of increasing their investment security and promoting a stronger local private coal industry. In short, Shanxi's decision to implement coal-industry transformation along the lines desired by the Center does not seem to have resulted from congruence between central objectives and a local Shanxi policy community's beliefs.

Conversely, in Guizhou we may expect the opposite: Donaldson (2011: pp. 37–60, 130–149) argues that from 1983 to 1994 Guizhou leaders strongly promoted privately-owned micro-scale (artisanal) mines as part of a development strategy focused on poverty alleviation rather than GDP growth. But the focus on artisanal mines had ended by the early 2000s, while strong growth of private mines continued throughout the 2000s. From c. 2004 on, Guizhou aggressively *closed down* the artisanal mines, which were the most important for poverty alleviation (cf. Chapter 4). Instead, mining became concentrated in (somewhat) larger private enterprises, which made much greater contributions to local GDP and taxes than the artisanal mines, but were less useful for poverty alleviation. In short, Guizhou's failure to nationalize the industry in the 2000s is hard to attribute to the unique policy orientation the province developed in the 1980s and early 1990s: at least with respect to mining, it had ended many years before.

In Shaanxi, too, it seems unlikely that the province's decision to refrain from nationalizing its private coal sector was due to a preference for private-sector based development strategies among local officials, since in 2003 Shaanxi had forcibly nationalized the private oil industry that had grown up in the province. For Inner Mongolia there are somewhat stronger indications that provincial decision-makers' choices may have been partly affected by a distinctive policy approach, focused on building up large private firms and sidelining the state sector. As early as the 1980s IMAR seems to have sought to develop large private firms, and in the late 1990s the province privatized all of its coal SOEs. While this policy approach was rather unique, by definition it therefore also explains little about the policy divergencies between the other provinces.

Above I have reviewed numerous prominent approaches in the literature towards the puzzle of uneven policy implementation, but found them to offer little guidance for explaining our puzzle. I next introduce the research strategy I used to try to explain it.

1.3 Research Strategy: Provincial Comparisons

So why did policy implementation diverge between different provinces? To answer this question, I undertook a detailed comparative study of policy and industry evolution in five major coal-mining provinces, of which two nationalized their industries (Shanxi and Henan), and three did not: IMAR, Shaanxi, Guizhou.

I selected Shanxi, Henan, IMAR, Shaanxi, and Guizhou for comparative study on the basis of their relative political-economic similarity and the comprehensive coverage of China's main coal geologies and development histories they provide. Shanxi, IMAR, Shaanxi, and Henan are the four largest coal-producing provinces by far, collectively accounting for slightly above 60% of China's coal output. Guizhou is the sixth largest coal province, just after Shandong; however, Shandong is not comparable to the foregoing four provinces in other respects.¹³ All five play crucial roles in the national energy system; the first four as key national suppliers of coal; Guizhou as a major supplier of coal and coal-based electricity to the southern and southwestern provinces. Their importance is reflected in the fact that 10 of the 14 "large-scale coal bases" (大型煤炭基地; essentially, strategically important mining regions) that the *Eleventh Five-Year Plan* defined, are located wholly or partially in these five provinces.

Coal is a key industry in all five, accounting, in 2010, for 4 to 29 percent of provincial GDP and 12.6 to 38 percent of Gross Industrial Output Value (GIVIO) (Table 1.1).¹⁴ All five had large TVM sectors during the 1990s and 2000s, accounting, at different times, for 30% to 45% of output in Shanxi, Shaanxi, and Henan; 40% to 60% in IMAR, and 60% to 80% in Guizhou (Figure 1.3). In all five, most of the rest of coal output came from large SOEs owned by the provincial and central governments.

All five are inland provinces, benefitting little from the post-1992 export boom. All grew rapidly in the 2000s, in part due to the coal boom, though Guizhou remains substantially poorer than the other four (Table 1.2). Shanxi, Shaanxi and IMAR are adjacent provinces in the North and North-West, Henan lies just south of Shanxi and Shaanxi, and Guizhou is a south-western province. Shanxi, Henan, central Shaanxi (关中) and Eastern IMAR are dominated by large-scale underground mining. Development of these coal fields began between the 1920s and 1970s mostly via large state mines, and until c. 2000 they supplied the bulk of China's coal. Northern Shaanxi (陕北) and Western Inner Mongolia are the new centers of the industry and uniquely in China are

¹³Throughout the 2000s Shandong's TVM sector was negligible, with SOEs always producing more than 95% of the province's coal. It is also much richer than the others; a result of its location on the eastern seaboard and early opening to large-scale export manufacturing, making coal is much less significant for the provincial economy.

¹⁴Shaanxi, IMAR and Guizhou only provide data for the contribution from "enterprises above scale" (规模以上), meaning firms with (declared) revenue above RMB 5 million a year. Their 2002 and to a lesser extent 2006 figures are therefore likely to underestimate the industry's true significance.

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dominated by opencast rather than underground mining. Guizhou finally is typical of other Southern and South-Western provinces in that coal fields tend to be smaller with complex geologies, making them less suitable for large-scale mechanized mining. Collectively, the five provinces cover all the main coal geologies and development patterns in China.

Table 1.1: Coal Mining as a Percentage Share of Provincial GDP and GVIO

Province	2002		2006		2010	
	GDP Share	GVIO Share	GDP Share	GVIO Share	GDP Share	GVIO Share
Shanxi	7.9	22.9	17.33	28.8	29.1	38
Shaanxi*	<i>missing</i>	<i>missing</i>	3	5.4	9.2	12.6
IMAR*	<i>missing</i>	8.3	<i>missing</i>	12	<i>missing</i>	19
Henan	<i>missing</i>	<i>missing</i>	3.6	<i>missing</i>	4.1	<i>missing</i>
Guizhou*	0.8	3.3	2.5	6.3	6	15.6

*Data are for “above scale” firms only.

Source: Provincial Yearbooks accessed via *China Data Online*

Field research was carried out in China from February 2012 to July 2013. Several caveats are in order at this point. The Chinese policy process is opaque and access to decision-makers or even just ordinary officials very hard to come by, especially for non-Chinese.¹⁵ This is doubly so for policy areas that are highly sensitive. Coal-industry restructuring was so because of the huge fortunes and commensurate corruption the

¹⁵Many interviews and introductions to officials and mine owners, in particular, were cancelled at the last moment when the would-be interviewee realized that I was not Chinese, and two had to be carried out by proxy.

Table 1.2: Provincial GDP per capita (in RMB)

Province	2001	2006	2010
Shanxi	6226	12647	26283
Shaanxi	5024	12840	27133
Henan	5929	13172	24446
Inner Mongolia	7210	20523	47347
Guizhou	2865	5932	13228

Source: Provincial Yearbooks accessed through *China Data Online*

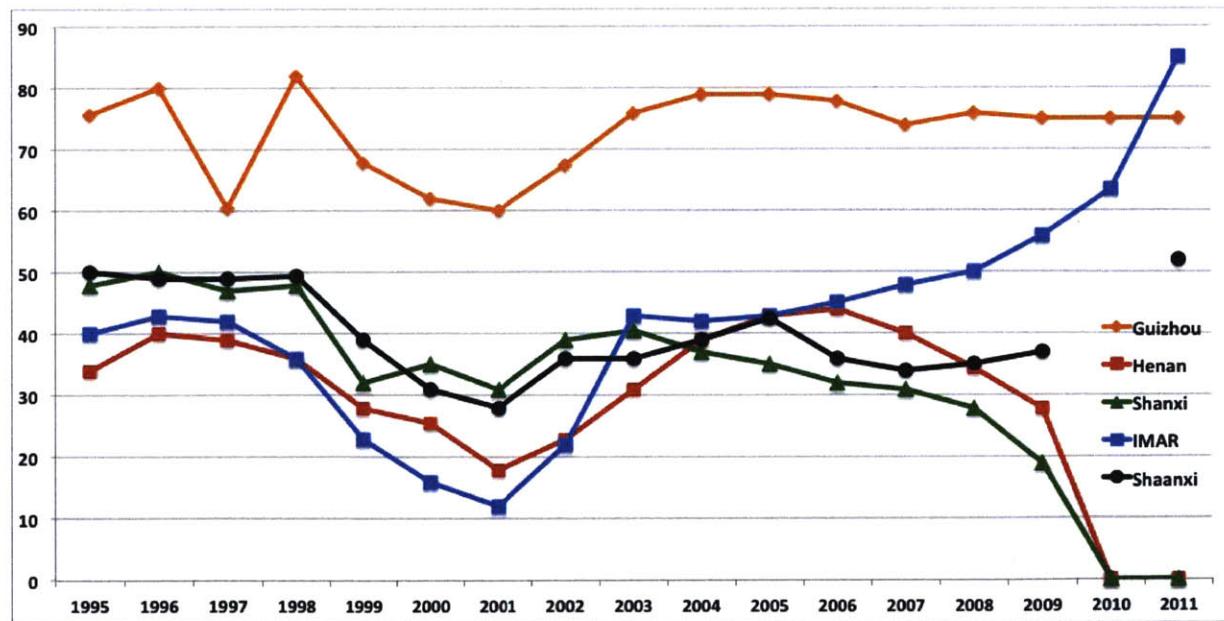


Figure 1.3: TVM Output as a Percentage Share of Provincial Coal Production, 1995 - 2011

Source: CCIYB, 1995-2012

industry had spawned, the high death toll, and the controversy sparked by mass expropriation of private owners. Statistical data on industry structure are messy. Yearbooks, state documents, official as well as commercial pronouncements use multiple categories to describe private mining sector – TVMs (乡镇煤矿), local mines (地方煤矿), private mines (民营／私营煤矿), small mines (小煤矿／小型煤矿). These terms are not very precise, do not always fully overlap, and at times appear to have been used to deliberately obfuscate reality.¹⁶ Official statements are sometimes intentionally misleading. Simply figuring out what really happened is difficult. Data on disciplinary proceedings against local officials, which will play an important role in my argument, had to be laboriously collected from thousands of newspaper articles, occasional state documents and a multiplicity of websites. Careful triangulation of materials – 90 interviews with Chinese officials, mine owners, SOE managers, journalists and scholars; Chinese media coverage and scholarly literature; and government documents and statistics – provides the evidence I present here. But alternative explanations (e.g. some form of capture or unobserved relations between central and provincial leaders) cannot be finally rejected. With these caveats registered, we can now turn to the explanation for the puzzle.

1.4 Argument of the Thesis

My research suggests that the divergence derives from the uneven political effects of varying provincial patterns of mining accidents. Building on research by James Reilly (2012), Peter Hayes Gries (2004, 2005), Gries et al. (2016) and Cai Yongshun (2010), I argue that accident patterns differed in their degree of political sensitivity because they elicited different levels of coverage in the media, giving them different implications for social stability. Therefore, they also elicited different responses from the state's formal disciplinary apparatus. As a result, the five provinces came under quite different levels of pressure to restructure their coal industries. This explains why Shanxi and Henan adopted increasingly radical forms of industry restructuring (i.e., forms highly detrimental to local interests). However, no direct path led from growing pressure to nationalization, the most radical form of change. Change took place through several different stages and sequences, with provinces first pioneering less radical forms of change (i.e., forms that sought to accommodate or preserve local interests), and only opting for nationalization after these had failed.

The five provinces studied manifested three different accident patterns, something driven, it seems, mainly by different geologies and the relative prevalence of large or small, and underground or open-cast, mines. Shanxi and Henan had comparatively good safety records overall. Statistically, Shanxi's mines, in particular, were among the

¹⁶One example is Shanxi's use of the category "local mines" (地方煤矿), discussed further in Chapter 4.

safest in the country. However, they also suffered many very *big* accidents (more than c. 20 fatalities); a result of the predominance of deep and relatively large underground mines, and in the case of Shanxi also of the sheer size of its coal industry (more mines leading to a higher absolute number of accidents). Shaanxi and IMAR, on the other hand, had relatively few accidents of any size. This was a consequence of more accessible geologies (less gas, lower risk of flooding, shallow seams) and the predominance of open-cast mining in both provinces. Finally, Guizhou by a wide margin had the highest number of accidents and deaths and, statistically, the least safe mines of all the five provinces, and indeed nationally. However, the prevalence of very small mines in Guizhou meant that there were few big accidents – few had more than 15 or 20 fatalities. Again this was a consequence of geology (high gas content, high risk of flooding, complex seams, and small and dispersed coal fields).

These different accident patterns had different political implications (Figure 1.4). As numerous authors have shown, the combination of media commercialization, tentative liberalization under Jiang Zemin and Hu Jintao, fragmented censorship systems, and the development of an ethics of “advocacy journalism” led to the rise of a more critical, investigative and sensationalistic press in China in the late 1990s and 2000s, that was only partially controlled by the state (Distelhorst 2013, Hassid 2011, Lynch 1999, Liebman 2005, Mertha 2010, Reilly 2012). Very high internet penetration and the development of chat fora, blogs, the twitter-like Weibo and other messaging services also created a contentious online public sphere (Gries et al. 2016, Thornton 2010, Yang 2009). (Since 2013/2014, many of these trends have gone into reverse under Xi Jinping.)

In this special media and online environment of the Hu-Wen period, the many big accidents in Shanxi and Henan provoked very high levels of often sensationalistic media coverage. A media narrative formed in particular about Shanxi that described it as a place of corruption, outrageous wealth, and callous disregard for life. This intense publicity turned accidents from local tragedies into a larger source of social instability. They became what the Chinese state calls “sudden events” (突发事件) – inflammatory cases of tragedy or malfeasance with the potential to spread swiftly through the media and internet, sparking widespread popular anger and challenging one of the regime’s main legitimizing claims, namely to be providing virtuous and effective governance and building a “harmonious society”.

As Reilly (2012), Gries (2004) and Gries et al. (2016) have shown for foreign policy, and Cai (2010) for responses to social protests, waves of negative media coverage of this kind and the associated online chatter have repeatedly forced policy changes on the state. This is what happened in Shanxi and Henan with coal-mine accidents. The intense coverage put severe pressure on these provinces’ governments to sort out the accident problem. Because accidents as well as the associated problem of corruption

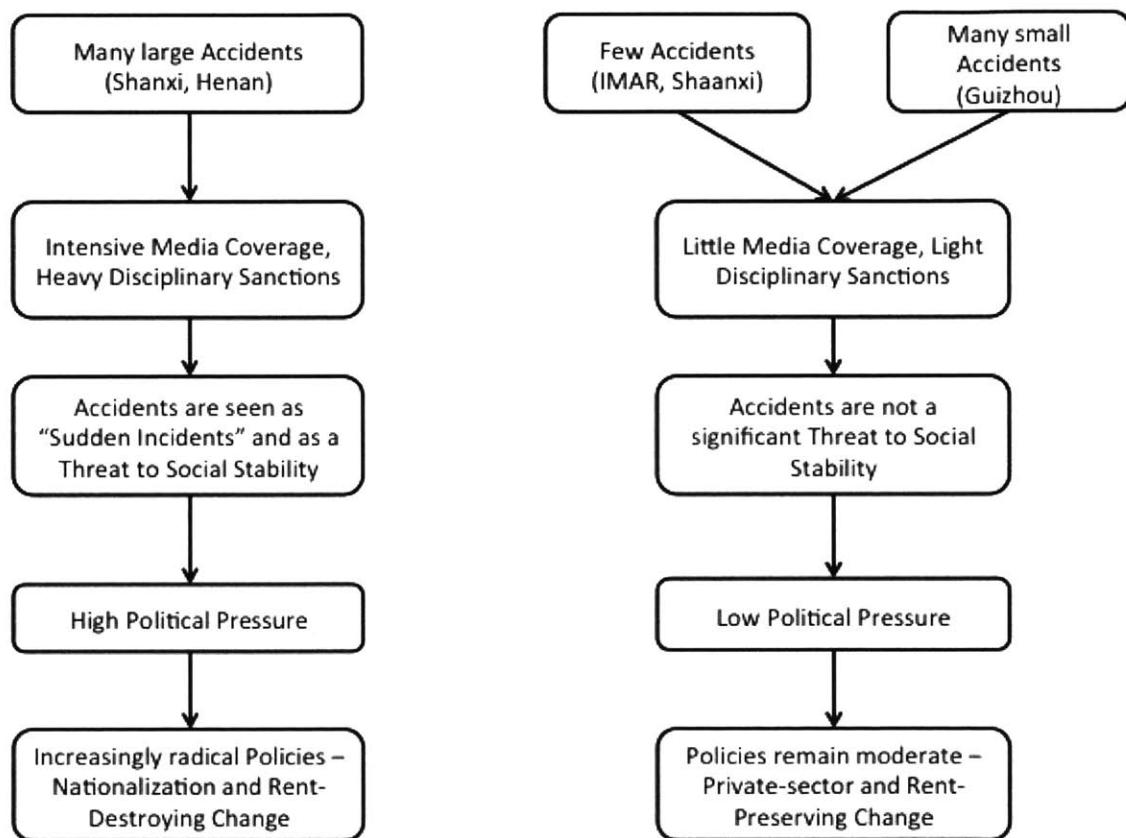


Figure 1.4: Key Causal Relations

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and local-government malfeasance were mainly concentrated in the TVM sector, that meant carrying out some form of restructuring of this sector.

This media-generated pressure over accidents that local and provincial officials came under was further reinforced by the operation of the party-state's formal disciplinary apparatus, which itself seems to have been responsive to media coverage. In other words, two distinct but intimately related and mutually reinforcing sources of pressure came to bear on officials in these provinces. State regulations mandate that while small accidents can be investigated by local authorities, large accidents must be investigated by provincial and even central teams. Local and, in extreme cases, provincial leaders are subject to disciplinary and even criminal punishments if malfeasance is found to have contributed to the accident or if they are found to hold (vaguely defined) "leadership responsibility" (领导责任) for it, a practice dubbed "holding accountable" (问责). Importantly, this disciplinary practice follows primarily a political logic concerned with the maintenance of social stability, rather than a technical logic focused on accident prevention *per se*. This expresses itself in two respects, and both meant that these practices seem to have brought especially severe pressure to bear on Shanxi and Henan, given their many large accidents and the intensive coverage surrounding them.

Firstly, disciplinary investigations seem to be concerned mainly with penalizing local and provincial officials for *large* accidents. This makes at best limited sense from the perspective of improving mining safety,¹⁷ but considerable sense if the primary concern is to avoid inflammatory "sudden events" – or pacify popular anger after the occurrence of such events. Secondly, disciplinary practices seem to have been as much a propaganda exercise, in which the state sought to demonstrate its claim to be providing virtuous government under which officials and the rich, too, would be punished for their misdeeds, as a tool of genuine bureaucratic accountability. The more intense the publicity surrounding an accident and the greater the sense of "popular outrage" (民愤), the more severe the disciplinary sanctions. These disciplinary practices moreover worked to make nationalization a particularly attractive option, because it was primarily SOE managers, not local and provincial officials, who were regarded as responsible in the event of accidents in SOE-owned mines. Nationalization thus took local and provincial officials out of the firing line.

As large accidents, sensationalistic media coverage and disciplinary practices fed on each other, Shanxi came under particularly severe pressure. More large accidents happened there than anywhere else, and the province attracted more coverage than any other. Unsurprisingly, therefore, it was the province that took the most action, from the earliest date on, to resolve the accident problem and restructure the TVM sector.

¹⁷Five accidents costing six lives each are no better, from the perspective of safety or the miners' affected, than one accident costing 30 lives – indeed, the frequent occurrence of small and mid-sized accidents may well be worse, since it suggests a lax safety culture in which accidents of all sizes are more likely. Therefore, western industrial safety systems generally do not consider accident size a significant metric, but focus more on the frequency of accidents of any size.

However, nationalization was not Shanxi's first choice, being adopted only after prior attempts to solve the problem by tightening regulatory oversight, *strengthening* private property rights (to incentivize safer mining operations) and promoting mergers and upgrading *within* the TVM sector (what I call "local consolidation") had failed to stem the flood of accidents. In other words, the initial approach was to try to solve the accident problem while preserving the TVM sector and thus protecting the local interests connected to it. Shanxi only moved to nationalization (rent-destroying change) when the continuing occurrence of very large, intensively-covered mining accidents revealed the earlier approach to have failed to solve the problem.

Much the same process occurred in Henan, the province with the second-highest number of large accidents and the second-highest levels of accident-related media coverage after Shanxi. Again, provincial authorities initially sought to solve the problem while preserving the private-mine sector – by tightening regulatory oversight and merging the private mines among each other. It was the continued occurrence of large, intensively-covered accidents that pushed Henan to follow Shanxi's lead and nationalize the mines. In both provinces this prompted intense resistance from local governments and mine owners. Rather than a single, straightforwardly implemented decision, in Shanxi as in Henan nationalization proved a drawn-out, halting and tortuous process, that was however propelled forward by the continued occurrence of big accidents. These gave the nationalization process renewed momentum even when resistance led to it becoming (temporarily) bogged down.

Conversely, the absence of significant numbers of big accidents in Shaanxi, IMAR and Guizhou meant that these provinces faced much lower levels of pressure over accidents and industry structure as both media coverage and, relatedly, disciplinary sanctions were much less intense. Accordingly, they opted for much less wrenching forms of industrial change. Here too regulatory oversight was tightened, the smallest and least safe mines closed, and a measure of (mainly intra-private) consolidation enforced. But fundamentally they sought to preserve their private mining sectors, thus protecting the local interests tied to them.

1.5 Outline of the Thesis

The rest of this thesis is organized as follows. Chapter 2 lays out how central-government policy evolved from the 1980s to the 2010s. The industrial and ownership structures of coal mining in China and the problems that afflicted the private-cum-smallscale (TVM) sector are sketched. I show that initial central-state support for the TVMs in the 1980s changed over the 1990s to a desire to close down that sector and consolidate the industry under large companies, with a strong bias towards state-owned coal companies. This policy evolution is attributed to a combination of leadership changes after 1989, the

temporary dislocation in the coal market caused by the late-1990s deflation, and the growing political salience of mining accidents in the 2000s. Particular attention is given to the debates over state ownership during the Hu-Wen administration (2002–2012). I show that the question of what role state and private ownership were to play in the industry remained in dispute. The dominant position at the Center, as expressed in the main coal-industry policy documents, was that state ownership was to expand and dominate the industry. The chapter concludes by noting that despite the relatively consistent articulation of this policy line, up to 2008 provincial policy largely sought to preserve the private mines, and even thereafter only Shanxi and Henan moved to nationalization.

Chapter 3 turns to the media coverage and the disciplinary sanctions that emerge as the driving forces behind the coal-industry restructuring examined in the subsequent chapters. Through content analysis of four major state and commercial newspapers and the materials posted on the Sina.com web portal, the chapter demonstrates that media coverage of mining accidents rose abruptly and substantially after 2001, and that it concentrated heavily on Shanxi and Henan. Based on interviews with media workers and analysis of leaked censorship instructions, the media's focus on Shanxi and Henan is explained with the disproportionate number of large, newsworthy accidents that occurred in both provinces and the easy accessibility of their mining regions from the major urban centers. The possibility that it was due to a state command or signal focus reporting on Shanxi and Henan is rejected.

The increased coverage of accidents is explained with the changes that occurred in China's media environment in the late 1990s and 2000s, including commercialization, the growth of a culture of investigative journalism, institutional gaps in the censorship regime, and a qualified willingness of the state to strategically permit a degree of investigative journalism and a somewhat more open media environment. During the Hu-Wen years these created a space for reporting "negative news" about societal, economic and political problems and conflicts. Accident coverage in particular also tended to be tolerated because it supported central-state policy objectives. However, rather than a case of active instigation of media coverage by the state, this seems to have been a matter of state and media agendas partially overlapping.

Yet tolerance of this coverage was by no means total. Drawing on interviews, documentary analysis and secondary literature, the chapter demonstrates that as the 2000s wore on, the authorities increasingly sought to curtail reporting on accidents and experimented with more subtle ways of gaining control of and managing the narrative surrounding "breaking-news"-style "sudden events" like accidents. The reason for this was that accidents and emotive reporting on them was seen as a threat to social stability because of its potential to inflame public emotions. That in turn explains the state's growing concern in the 2000s to get the coalmining safety crisis under control.

Chapter 3 also analyzes how the party-state's disciplinary processes treated mining accidents. The argument is that these processes were animated by a political as much as

a functional logic, with accidents that were large or garnered extensive coverage and public attention drawing harsher sanctions than even numerous and cumulatively more deadly smaller accidents. This claim is substantiated through documentary analysis, interviews, and an original data set on sanctions given to local and provincial officials over mining accidents in Shanxi and Guizhou; two provinces with, respectively, comparatively few accidents overall but disproportionately many large and intensively-covered ones (Shanxi), and many small accidents that cumulatively cost significantly more lives both in absolute and statistical terms, but drew little coverage (Guizhou). The conclusion is drawn that Shanxi and, presumably, Henan (since it had an accident and coverage profile similar to Shanxi's) were under significantly higher pressure from the disciplinary system than other provinces.

Chapter 4 then turns to the political economy of coal-industry restructuring. The first part of the chapter examines the substantial benefits that the private mines provided to local governments. The chapter shows how local authorities' administrative powers and the private mine owners' often uncertain property rights and weak legal-political status gave local officials substantial and effectively arbitrary power over them. Mine operators were dependent on cultivating close relations with officials to protect their mines, enabling large-scale rent extraction via quasi-taxes like fees (费) and forced "charitable donations" (慈善捐款), and various forms of bribery. By contrast, local governments held much less power over the provincial and central SOEs (due to the latter's greater bureaucratic rank and power), and were thus much less able to extract from them. Beyond extraction, these power imbalances meant that private mines were also easier to control than the state mines (making local governance easier), and, due to their labor-intensive mode of production, tended to provide more employment locally than the state mines. Accordingly, local governments had strong incentives to preserve the private coalmining sector, and were reluctant to see SOEs take over their local coal industries.

While systematic comparative data on rent extraction and power relations between local governments and private and state mines in the different provinces are not available, I use newspaper articles, interviews, and government reports to show that although the details may have varied, this basic dynamic – massive extraction from private mines by local officials, enabled by arbitrary power, and concomitant desire to preserve the private sector and avoid SOE takeovers – was present in all the case-study provinces. Yet local governments are not monolithic actors. The chapter explains why the personal incentives of the top municipal leaders sometimes diverged from those of the wider subprovincial administration, leading them, under certain circumstances, to support the nationalization of private mines.

The second part of Chapter 4 analyzes the industry restructuring that took place in the five case-study provinces from 2000 to 2007. The large, provincially-owned state mines were strengthened, the regulatory regime for the private mines tightened, and an initial round of structural adjustment was forced on the industry. This was a response to both

the growing safety crisis – which was attracting evermore public and media attention – and the publication of a more detailed industrial policy for the coal industry by the Center, which was itself at least partly a response to the accident problem and the media attention it was receiving. But while central policy was aimed squarely against the private sector and sought its elimination, the measures the provinces took were much more cautious, and sought, in essence, to preserve the private sector and thus the rents it supplied to local governments, while curing it of its worst ills. In none of the provinces did SOE takeovers of private mines occur on a significant scale. Instead, the focus was on tightening regulation and oversight, and on promoting consolidation *among* the private mines, with ownership remaining private and regulatory and thus extractive power with the local governments. However, even these changes seem to have been implemented earlier and more aggressively in Shanxi and Henan – the two provinces most under the media spotlight and where *large* accidents were most of a problem.

Chapter 5 continues the story of how provincial coal-industry policy evolved after 2007. It shows how a series of massive mining accidents in Shanxi and Henan that elicited intense media coverage and unprecedently severe disciplinary sanctions served as critical junctures, prompting the move to nationalization in both provinces and propelling it forward despite resistance from local officials, mine owners, and liberal media outlets. The role that the Center played in this is discussed. I argue that while repeated central intervention in support of nationalization was crucial for keeping it on track in the face of resistance, the key decisions over nationalization seem to have been taken by provincial and in some cases municipal leaders.

Conversely, in the other case-study provinces, the chapter shows, industry structure remained largely unchanged. While these provinces too came under pressure to implement further consolidation and structural adjustment in their coal industries, they systematically structured the consolidation processes so as to preserve the private mining sector. Based on interviews, media reports and comparative inference, this is attributed to the much lower pressure they were under over mining accidents, which made them unwilling to countenance the kind of radical, rent-destroying change Shanxi and Henan opted for.

Chapter 6 concludes with a discussion of the implications of my findings for larger debates about, and future research on, policy making and implementation in China, the role of media and public opinion in Chinese politics, and China's "state capitalism" and crowding out of private firms from strategic industries (*Guo Jin Min Tui*).

Chapter 2

Central State Policy Towards China's Coal Industry

2.1 Summary of the Argument and Chapter Outline

This chapter examines how the central state's coal-industry policy evolved during the Reform era. In order to make sense of this evolution, it is necessary to understand the peculiar political-industrial structure of coal mining in China, and the problems this structure created. This is discussed in Sections 2.2 and 2.4, which explain the industrial and ownership structure of coal mining in China (Section 2.2) and lay out the problems that afflicted the private-cum-smallscale ("township and village mine") sector (Section 2.4).

The main arguments of the chapter are as follows. Firstly, I show that central-state policy shifted over time, and can be divided into two distinct regimes. From 1983 to c. 1989, the dominant stance of central-government policy was directionally liberal, focused on growing coal output by encouraging private and collective entry into the industry and freeing prices (Section 2.3). Over the 1990s however policy gradually changed and by 1998 policy can be characterized as directionally statist, focused on building up large coal companies – with a strong bias towards state-owned coal companies – and on using state intervention to consolidate the industry under these firms and eliminate or at least sharply reducing the private-cum-smallscale sector. Policy retained this focus throughout the 2000s and into the 2010s. This evolution is discussed in Sections 2.5, 2.6 and 2.7, which deal with policy in the 1990s, the shift brought about by the late 1990s deflation and Asian Financial Crisis, and the Hu-Wen era, respectively.

These shifts in coal-industry policy correspond to larger shifts in economic policy, which after 1989 moved from "directional liberalism" focused on rural entrepreneurship to more statist industrial-policy concerns focused on building up large, preferably state-owned national champions (Eaton 2013, Huang 2008, Heilmann and Shih 2012).

The second main argument of the chapter concerns central-government preferences and debates over state ownership in the coal industry during the Hu/Wen administration (2002–2012), which is the crucial time period when the provincial policy variation that this thesis seeks to explain came about. The argument, advanced in Section 2.8, is that while central-government policy makers had, by 2005, become deeply concerned over the problems that the predominantly small-scale private sector was creating and believed that radically consolidating the industry in larger production units was key to solving these problems, there was no official policy consensus about the preferred roles of state and private ownership. Yet while there was considerable conflict over this question, that does not mean that the countervailing positions were evenly matched. Rather, the position that state ownership of coal mining was to be substantially expanded and the private sector's share of the industry significantly reduced was the dominant position at the Center. It appears to have been supported by a majority of Politburo Standing Committee members and by those state institutions mainly involved in formulating coal-

industry policy. Accordingly, it consistently found expression in the key coal-industry policy documents.

However, a minority position was skeptical of the value of establishing a dominance of state ownership in coal mining and advocated preserving space for private capital in the industry. This position, too, managed to get itself expressed in several authoritative central-government policy documents and on at least one critical occasion in 2006 seems to have succeeded in significantly neutering the expression of the “pro-state ownership” view in an important policy document. There are indications that this position, too, had the support of some Standing Committee members, including, it appears, Wen Jiabao and Li Keqiang.

As Section 2.8 will argue, this minority position was nevertheless hamstrung in crucial ways. Most importantly – and this makes the issue intensely confusing – efforts to expand state ownership overlapped with the – in theory, separate – policy agendas of eliminating small-scale and “backward” (国有重点煤矿) mines and “excess” capacity and consolidating the industry. While analytically these issues (ownership – consolidation – elimination of “backward” capacity) were entirely distinct, because of the structural characteristics of the coal industry they overlapped in practice. Even those individuals and institutions that appear to have been skeptical about expanding state ownership (e.g. Wen Jiabao, the State Council Development Research Center) were committed to activist economic governance, embraced heavy state intervention, and strongly supported the agenda of eliminating small-scale, “backward” mines and “excess” capacity, and consolidating the industry in large production units.

The presence of conflicting positions and the absence of consensus at the Center with respect to ownership matters, because it meant that provincial governments enjoyed considerable flexibility with regard to how and to what extent they restructured their coal industries. The conflicting documents and their often vague language meant that many different policies could be justified with them. As we will see in Section 2.9, there is evidence for provinces disregarding ownership-related central documents, sometimes in rather blatant ways.

2.2 Industry Structure: Ownership Types

Crucial for understanding evolving central-government policy is the way the industry was subdivided into three distinct strata of enterprises; “Key State-owned Mines” (国有重点煤矿), “Local State-Owned Mines” (地方国有煤矿) and the non-state “Township and Village Mines” (乡镇煤矿), which were partly collectively-owned and partly private, but with private ownership dominating by the 2000s.

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At the dawn of the Reform Era in 1979, SOE mines accounted for the great bulk for coal production (83.3% of total output). The remainder came from the “Township and Village Mines” (TVMs; or, as they were then still commonly known, “Commune and Brigade” mines).¹ The state sector consists of two main categories; “Key State-owned Mines” (KSOMs) and “Local State-Owned Mines” (LSOMs). As the name suggests, the KSOMs were (and are) large and storied concerns that played a central role in the coal production and distribution system. They provided the bulk of the coal distributed via the Central Plan (up to 1993) and most of the coal allocated administratively at sub-market rates to electricity companies since then through various successor mechanisms to the Plan.

Throughout the history of the People’s Republic, the KSOMs have formed the main block of the state sector, enjoyed the best access to state investment funds and bank credit among coal firms and generally had the best mining equipment and working conditions within China’s coal industry, as well as the best safety performance (Figure 2.3). Between 1979 and 2010 they always accounted for around 50% of total coal output (Figure 2.1). In total, there are around 735 KSOMs in China today, up from 594 in 1995, belonging to just under 100 enterprises (IEA 2009: p. 42). Until 1998, these enterprises were owned by the central government. That year, however, ownership of all but two was transferred to the provinces, with the Center retaining ownership only of Shenhua and China Coal (the two largest and most profitable coal-mining SOEs). In short, the KSOMs are the large state mines that are owned by the provincial governments and the Center.

“Local State-Owned Mines” (LSOMs) are generally smaller enterprises, usually owned by subprovincial (county and municipal) governments (Thomson 2003: p. 182; CCIYB 1995–2012). In terms of access to state investment funds and bank loans, equipment, working conditions and work safety, the LSOM sector stands between the KSOM sector and the Township and Village/Private Mines (Figure 2.3). Throughout the period 1979 to 2010, LSOM output grew much more slowly than KSOM and TVM output, and their share of coal output gradually fell from 27% (1979) to about 15% (2010).

It is not clear why LSOM output grew so sluggishly while the other two categories raced ahead. One possibility is that local governments found that while direct mine ownership left them exposed to market downturns, private ownership still enabled them to profit handsomely from upswings due to their extensive *de facto* fiscal and control powers over the TVMs, but without exposing them to as many risks, and without making the same investment demands on their budgets. There is anecdotal evidence that many LSOMs were privatized in the 1990s, when many mines were losing money (cf. Chapter 4).

This structure of the state sector remained remarkably constant throughout the period 1979–2012. The great coal boom of the 2000s drew in a certain amount of investment

¹For detailed historical production data of the different types of mines see IEA (2009: p. 327, Table I.D); Tu (2011: p. 20, Figure 2.5). Unless otherwise indicated, output data are from IEA (2009).

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from state corporations whose primary business was not mining – especially electricity and steel concerns – but up to 2012 the state coal-mining sector remained composed largely of the same firms that existed already in 1979 (with the notable exceptions of the Shenhua Group, today the world's largest coal company, and China Coal, China's second-largest coal company, which were founded in 1995 and 1984 respectively).² The greatest change to take place in the industry between 1979 and today was the rise of the TVM sector.

As Figure 2.1 indicates, throughout the Maoist period (1950–1976) a small “collectively-owned” (集体) sector existed alongside the Key and Local State-owned Mines, operated by townships/communes (乡镇/公社) or villages/production brigades (村/生产大队). At the extreme margins, privately-owned mines probably never disappeared entirely – as late as 1957 the state set output targets for private mines of 4.1% of total production (Thomson 2003: p. 37) – but for most of the Maoist period whatever private ownership existed was probably no more than artisanal production by peasant households.

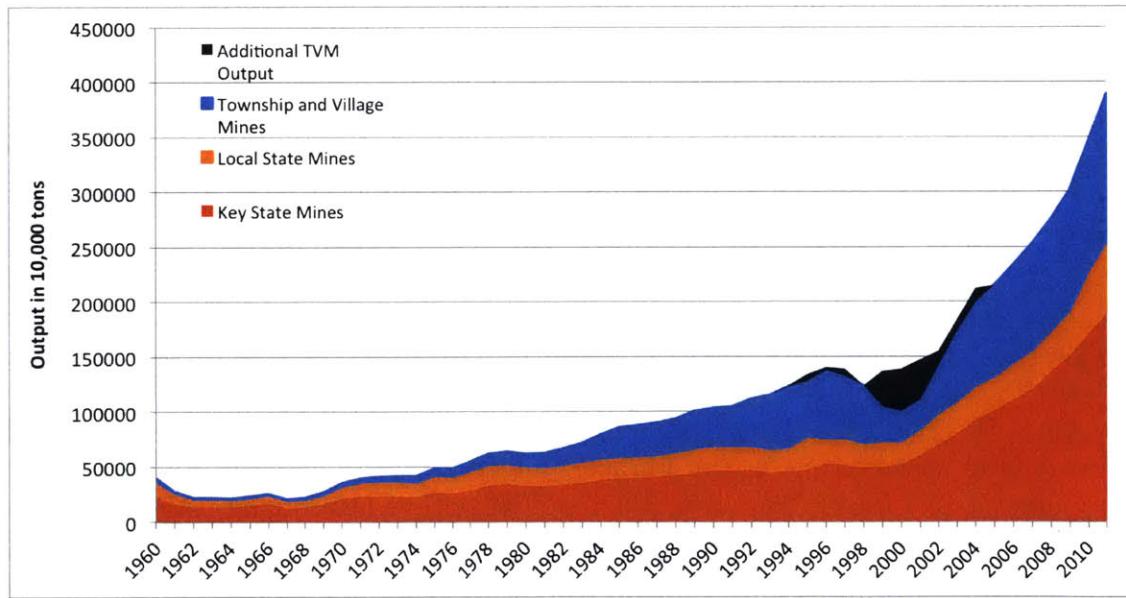


Figure 2.1: Industry Structure: Coal Output by Enterprises of Different Ownership Types

Sources: CCIYB 1994–2011; IEA 2009; Wright 2012. The additional TVM output was calculated by Tim Wright (2012) on the basis of the National Bureau of Statistics' own recalculations of coal production. I am indebted to Tim Wright for kindly allowing me to use his data.

²The history of what is today Shenhua goes back to 1984 or 1985, but the Group was only created in 1995. The best overview of the history of Shenhua to c. 2000 is provided by Nolan (2001: pp. 734–759). For China Coal see Thomson (2003: pp. 114–116, 145–147, 157, 249–250).

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Both during the Maoist years and in their 1980s heyday, Chinese collective enterprises were “state-owned” in the (Western) sense that ownership rights lay with the village or township government but differed from what in China was referred to as “state-owned enterprises” (国有企业) in that their output was not distributed via the national planning system but could be consumed locally or traded outside of plan structures (cf. Thomson 2003: p. 29). Moreover, they had much poorer access to the state banking and investment systems, and accordingly offered their workers lower wages, benefits and working conditions than the SOEs (Walder 1985: pp. 43–48, 54–56), something reflected also in the fact that the TVMs’ accident toll was much higher than that of the state mines even in the 1960s, 1970s and 1980s, when much of the TVM sector still was collectively-owned (cf. Figure 2.3 and Wright 2012: pp. 167–170).

Despite a first jump during the Great Leap Forwards (1958–1960) TVM output remained small until the end of the 1970s, but then shot up in the 1980s, with average growth rates far exceeding those of the state mines (cf. Figures 2.1 and 2.2). TVM growth remained strong also in the 1990s and 2000s, even though KSOM output and growth rates increasingly caught up with and eventually surpassed the now mostly-private TVM sector, and, as discussed below, central-government policy turned increasingly hostile.

2.3 Central Government Policy, 1980–1989: “Letting Stagnant Water Flow”

After the Maoist period, as government policy focused on economic development, energy shortages emerged as one of the key bottle-necks obstructing rapid growth (Naughton 1995: pp. 77–78, 86–87, 134). An equally serious constraint was lack of capital, a state of affairs summed up in the phrase, “industry wants coal but [the government] lacks money” (业要煤而没钱) (Rui 2005: pp. 42, 60). Encouraging TVM growth was attractive under these circumstances. Initial experiments with the non-SOE mines in the mid-1970s had proven that they were able to provide rapid and flexible increases in coal output. Investment and wages would come out of locally-raised funds rather than central budgetary allocations, thus relieving the Center and the provinces of financial burdens while allowing much greater output to be achieved. The TVMs’ labour intensive mode of production meant that far less capital would be needed to swiftly raise coal output. Official sources from the early 1980s for Shanxi, the major coal-producing province by this point, estimated that constructing a new large state mine would cost RMB 108 per ton of coal, but a TVM would only cost RMB 16 per ton (Thomson 2003: p. 117). In 1985, Premier Zhao Ziyang made this a key argument for promoting the TVM sector, noting that if Shanxi’s coal reserves were developed by simultaneously building large mines (i.e., KSOMs), medium mines (KSOMs and

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LSOMs) and small (i.e., TVM) mines but concentrating development on the TVMs, this would cost RMB 20 billion (bn), of which only RMB 9 bn would have to come from state loans. Conversely, development strategies focused on constructing large mines would cost RMB 30–40 bn (Thomson 2003: p. 126).

Three ancillary concerns also spoke in favor of encouraging the rural non-state mining sector. Firstly, it would make coal available to localities, thus facilitating development (Wright 2000a: p. 117f.). Secondly, by providing alternative fuel sources, it would reduce deforestation (Wright 2000a: p. 118; 2007: p. 184). Thirdly, it would boost rural incomes. The tremendous economic and, especially, fiscal boost that the TVMs afforded rural communities and local governments will be discussed further in Chapter 4, but the following illustrative statistic is worth citing here: In 1978, average per capita income in Zuoyun County (左云) in Shanxi was RMB 72. By 1984, the growth of TVM mining had raised it to RMB 816 (CCIYB 1985: p. 109–11).³ Guizhou province, in particular, made the support of small TVMs a center piece of its poverty alleviation strategy in the 1980s (Donaldson 2011: pp. 144–146). These pragmatic considerations aside, there is reason to believe that key leaders in the 1980s – especially Hu Yaobang and Zhao Ziyang – saw encouraging TVMs as part of a larger program to reform China's economy and society by promoting rural industrialization based on the private sector (Huang 2008).

These motives had led state authorities to give initial support to the TVM sector as early as the mid-1970s (Thomson 2003: pp. 48–50). However, aggressive support had to wait until 1983. The key policy document was the 24 April 1983 State Council *Notice Approving the Report by the Coal Ministry on Eight Measures to Speed Up Development of Small-Scale Coal Mines*.

This document contained two crucial measures. Firstly, it urged communes and production brigades (i.e., townships and villages) to set up collective mines and stipulated that “the masses” (群众; i.e., ordinary rural residents) themselves were allowed “to pool funds to set up and run mines” (集资办矿), that is, act as private mining entrepreneurs. This permissive attitude to private entrepreneurship had already been announced one month earlier in a front-page *People's Daily*⁴ article entitled “Collectives and Individual [Entrepreneurs] are All Welcome (集体个人均欢迎, 各行各业都可上) … Coal Ministry Relaxes Policy, Encourages (鼓励) the Masses to Develop Small Coal Mines”. The article quoted the Coal Minister, Gao Yangwen (高扬文), as stating that besides communes, brigades and the masses collectively pooling funds, individual households (专业户) could also contract out mines (*PD* 1983).

³I am indebted to Thomson (2003 : p. 227) for alerting me to these data.

⁴The *People's Daily* is the official organ of the Chinese Communist Party Central Committee, making it the most authoritative newspaper in China. While *People's Daily* editorial decisions do not necessarily reflect a government consensus, they can generally be read as embodying the “spirit of the Center” (中央精神), that is, providing an authoritative guideline to current leadership policy directions and priorities.

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The second key measure announced in the State Council *Notice* was to permit the free sale of coal produced out of plan by the small mines – at market, not plan, prices. Given the high demand for coal, this provided strong incentives to set up mines. The small mines were empowered to set wages, salaries and benefits as they saw fit. The document also announced several further support measures for the TVM sector including tax exemptions and some access to credit from the Agricultural Bank. Provincial coal bureaus and SOE mines were to provide the TVMs with technical and other support services (State Council 1983).

This policy stance became known as “Let Stagnant Water Flow” (有水快流). It was a typical example of the wider approach the Chinese government took to economic development and rural industrialization in the 1980s; viz. encouraging market-based entrepreneurial activity by local governments and private individuals via collective and private enterprises, the so-called “township and village enterprises” (TVEs) (Huang 2008; Naughton 2007). The policy was reaffirmed by the State Council in 1984 (*PD* 1984b), and in 1984 and 1985 by CCP General Secretary Hu Yaobang, who told local party committees in Hubei and Xinjiang to encourage peasants to develop small-scale collective and “individual” mines (个人, that is, privately-owned ones)⁵ (*PD* 1984a, 1985). Zhao Ziyang made similar remarks in Shaanxi Province in 1986 (*PD* 1986). The *Sixth Five-Year Plan* (1986–1990) even called for prioritizing the construction of “small and medium mines” (i.e., TVMs) over that of “large-scale mines” (i.e., KSOMs), a statement which marked the high point of central-state support for the TVM sector. The *Plan* encouraged localities and departments to pool funds for small-mine development and to extend additional support to the best TVMs (State Council 1986). In sharp contrast to policy 20 years later, when such shareholding was made illegal, local cadres were urged to invest their personal savings in TVMs (Interview 58).⁶ For instance, in 1984 the Party Secretary and Village head (乡长) of Chenlu Village (陈炉乡) in Shaanxi were praised for having “led the way in pooling funds and becoming shareholders in local TVMs” (带头集资入股办矿) (*PD* 1984c).

“Letting stagnant water flow” was a considerable success in terms of rapidly raising coal output. As Figures 2.1 and 2.2 show, TVM output grew rapidly through the 1980s and again from 1992 on, when coal demand was boosted by the economy-wide growth spurt unleashed by Deng Xiaoping’s “southern tour”. Low costs and flexible operations made the TVMs and their investors ideally placed to capitalize on this demand. In most years, TVM growth rates were far above those of KSOMs and LSOMs, and TVMs contributed

⁵Technically, an “individually-operated” enterprise was to have no more than seven employees, a cut-off line chosen because in Kapital Marx used the fictional example of a firm employing eight people to illustrate his labour theory of value. Therefore party theorists could argue that enterprises employing fewer than eight people were not properly “capitalist”. The concept of “individually/household-operated” (个体户) businesses thus allowed the re-introduction of private ownership in 1980s China while side-stepping ideologically and politically contentious terms, such as “private” (私营) firms. In practice, the 7-person limit was enforced laxly, if at all. (Huang 2008: p. 100).

⁶Guizhou journalist

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66.5% of the total increase in coal production over the years 1983 to 1996. According to official data, the TVMs' share of total coal production grew from 24% in 1983 to 45% in 1996, though calculations by Tim Wright suggest it could have been even higher (cf. the black space in Figure 2.1). Aside from the years 1998–2001, when mass falsification of the statistics is commonly believed to have taken place, even officially recorded TVM output would remain around 35-38% through to the end of the 2000s.

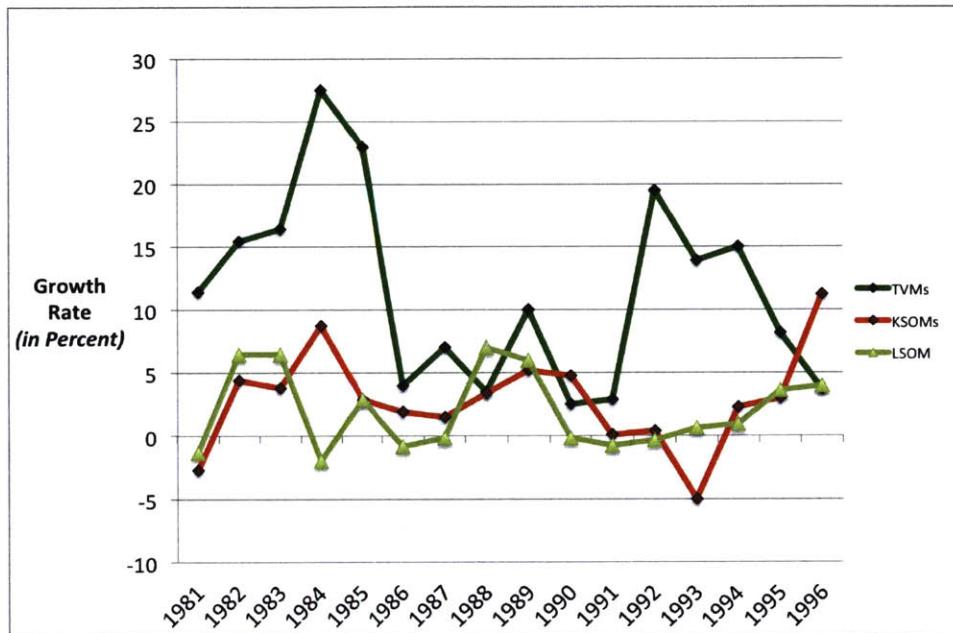


Figure 2.2: **Output Growth Rates for Different Types of Mines**
Sources: Calculated from IEA 2009

Yet rapid TVM growth also had much more negative effects, and this help explain why policy eventually turned against them. Accidents, unstable markets, and environmental pollution and wastage of coal reserves were inherent in the TVMs' industrial structure and mode of operations. I discuss this next because it constituted at least part of the cognitive basis for the perception common among officials that the Chinese private sector was incapable of operating coal mines well and thus provided justification for the policy effort to replace the TVM sector with large state mines. In the sections thereafter I will describe the post-1989 policies of the central government towards the coal industry and the TVM sector.

2.4 The Industrial Structure of the TVMs and its Problems

Seven aspects pertaining to the structure and operation of the township and village mining industry are worth examining in more detail, because they bear directly on the subsequent evolution of policy: mine numbers, mine sizes and mining technologies, ownership, pollution, competition with SOEs, and safety. As often in China, the data are confused and sometimes contradictory. To do justice to the subject matter (and provide a sense of the informational constraints under which policy making – and scholarship! – in China often operate), I lay out some of these confusions and contradictions, but highlight what I believe are the most reasonable interpretations of the data.

2.4.1 TVM Numbers

Throughout the 1980s, 1990s and 2000s, the TVM sector consisted of tens of thousands of coal mines. Beyond this general picture, though, it is difficult to provide definite numbers. The 1983 State Council *Notice* discussed above claimed that in 1982 there were some 16,000 TVMs in China. But already in 1984 a study of 24 of China's 31 provinces reported 40,000 TVMs to be in existence (Su 2002: p. 88, Fn. 19). Data from 1995 give a figure of about 69,000 collective and private mines (Ye and Zhang 1998, reported in Wright 2012: p. 97). A Coal Ministry official interviewed by Elspeth Thomson in 1998 stated that there were about 50,000 TVMs then in operation, while the *Township and Village Enterprise Yearbooks* reported 29,000 TVMs in 1996 and 27,000 in 1997 – but other sources spoke of up to 80,000 TVMs in the mid-1990s (Thomson 2003: p. 185 and Fns. 15, 17). She concludes that “[i]t was impossible for the central authorities to know the precise number of [TVMs] functioning at any given time.” (*ibid.*)

During the 1998–2001 TVM closure campaign (discussed further in Section 2.5 and Chapter 4) 40,000 to 60,000 mines were supposedly shut down. Sources for the early to mid-2000s speak of only around 22,000 TVMs nationwide (Wang 2006: p. 9; cf. NDRC 2007: p. 31). But as we will see, the closure campaign failed. Much of the TVM sector evidently remained in existence *and in operation* throughout, albeit without declaring its output until the campaign wound down in 2001/2002 – whereupon officially reported TVM output rebounded extremely rapidly.

Given that TVM *output* thus grew substantially between 1998 and 2003, it is difficult to know what to make of the apparently large reduction in TVM numbers between the mid-1990s and the mid-2000s implied by these data. One possibility is that the larger, commercially-oriented TVMs always made up the bulk of (reported) TVM output and never numbered much above 25,000–35,000 mines, with the difference to the upper-range estimates of the total number of TVMs consisting mainly of very small, artisanal

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mines worked by peasants to supply themselves. This artisanal sector certainly existed on a substantial scale in the 1980s and 1990s, though a large portion of its output never entered the official statistics (Wright 2012: p. 94). As we will see in Chapter 4, there is also evidence that *these* smallest and least commercial TVMs were indeed closed down on a large scale in the early to mid-2000s.

The general point to keep in mind here is that throughout period from the mid-1980s to 2008 there were always *at least* 20,000 TVMs in existence (and much of the time probably closer to 25,000 to 30,000) and these consistently supplied 35–45% of total Chinese coal output.

2.4.2 The Size of the TVMs

China divides coal mines according to their production capacity into three categories; small-scale (小型; up to 300,000 tons of output per year), medium (中型; 300,000 to 899,999 tons) and largescale (大型; 900,000 tons or more). Obtaining data on the total number of operating coal mines in China at any point in time and the size and ownership categories they fell into is remarkably difficult, because most data only report coal output, not the number of mines falling into different size and ownership categories. Even worse, no data source that I am aware of provides systematic information about the size distribution of the mines *within* each of the different ownership categories. We are thus forced to compare different data sets that report *either* the output by ownership category *or* the number of small/medium/large mines, *or* the number of township and village, key-state and local-state mines.

Fortunately, however, the available data paint such a clear picture that only one conclusion can be drawn, and this conclusion is moreover consistent with the “qualitative” evidence: namely that most of China’s mines fell into the small-scale category, and that most of these in turn were TVMs. This fact is utterly crucial for understanding Chinese coal-industry policy in the 1990s and 2000s. This fact also has implications for how to interpret government documents and pronouncements: to some extent, the terms “small” and “large” mines could function as code words for “private/TVM” and “state” mines.

National data on mine numbers and mine sizes were reported by the State Agency for Work Safety (SAWS) for 2003, and by the NDRC for 2005. According to SAWS, there were 24,439 coal mines in China in 2003, of which 21,759 were TVMs (Wang 2006: p. 9). According to the NDRC, in 2005 there were 20,622 mines that were smaller than 300,000 tons (NDRC 2007: p. 31). Putting these two data points together, we can say with virtual certainty that most of the TVMs were small mines.

Evidence from Shanxi paints a similar picture. In 2008, there were 2598 coal mines in the province, of which 197 were “large-scale”, 700 “medium-scale” (defined here as

300,000 to 600,000 tons) and 1700 “small-scale” (Huang 2011). Of these 2598 mines, 140 were Key State-owned Mines, and since these mines had an average output of 1.9 million tons (mt), we can safely assume that all or most of the KSOMs will have fallen into the “large-scale” category (CCIYB 2009: p. 407). Only about 70 Local State-owned Mines existed in Shanxi at this point (cf. CCIYB 2007: p. 341), meaning that about 90% of Shanxi’s mines in 2008 were both private and small or medium-sized, with most being small. Except for the special case of Inner Mongolia – where a substantial number of very large private coal-mining firms had developed by the late 2000s (cf. Chapter 4) – the industrial structure in the other provinces in China was basically the same as in Shanxi.

2.4.3 Mining Technology and Coal Recovery Rates

A correlate of the TVMs’ labour-intensive mode of production was simple production technology with low coal recovery rates. Problematic about low recovery rates is that they render useless the remaining coal, which becomes effectively unmineable due to gas build-up and water penetration.

Yet how primitive the technology and how low the recovery rates *really* were is less certain. Certainly it seems clear that the TVMs were slow to adopt more mechanized forms of mining, with room-and-pillar mining rather than the more efficient, safer and far more capital-intensive longwall mining remaining the predominant method up to the late 2000s, with very primitive forms of manual extraction like pick axes still found at the smallest mines (UNDP 2004: pp. 24, 155, 161; IEA 2009: p. 44; Donaldson 2011: pp. 142–143). Chinese officials and scholars quoted in the media in the 2000s routinely spoke of the small-scale/TVM sector having recovery rates as low as 15–20%. Recent studies jointly undertaken by the IEA, World Bank and China’s National Energy Administration, too, claim that the TVM sector achieved average recovery rates of only 15–20% (IEA 2009: p. 44; World Bank 2008: p. 15). Similar claims were made to me by a researcher from the NDRC’s Energy Research Institute (Interview 12).

Conversely, a Chinese survey from 2005 found that even the “ultra-small scale” mines (小煤矿; less than 30,000 tons output) achieved average recovery rates of 40%. This was not that far off from the rates of large and medium-sized mines (48% and 43%, respectively) (Shi 2007: p. 18). For comparison, in the US today, average recovery rates at underground mining operations are 56–59% and can be as low as 44% (EIA 2012: Table 16).

It is not clear why the results of this study appear to have made few inroads into Chinese policy discourse. Possibly there were doubts about the reliability of the data, but it is also conceivable that this more positive assessment of the TVM sector no longer fitted the political climate, which by the mid-2000s had turned resolutely against the TVMs.

The general point to keep in mind is that, whatever the TVMs' true recovery rates, government officials' overwhelming perception was that the sector was extremely inefficient and destroyed and wasted large amounts of finite coal resources.

2.4.4 TVM Ownership

The 1983 *Notice* that initiated the *Let Water Flow*-policy explicitly permitted private individuals ("the masses") to set up mines, even while it encouraged township and village governments to invest in "collectively-owned" mines. Both collectively and privately-owned firms were referred to as "township and village enterprises", an ambiguous category that could refer to either ownership (enterprises *owned* by the townships and villages) or location (enterprises *located* there). Categories were further complicated by the fact that until the 2000s, many *de facto* private enterprises were formally registered as collectively-owned (so-called "red hat enterprises"). What the true prevalence of different ownership forms in the 1980s was is thus almost impossible to say, but it appears that even then a substantial number of the mines were private. For instance, in 1985, of Liaoning's 1216 TVMs, 489 were collectives and 727 were private or individually-operated mines (Wright 2000a: p. 130). In southern China, private/individually-operated mines may have been even more common (Wright 2012: pp. 96–97). It appears that it was usually the larger TVMs that were – at least formally – collectively-owned, while those TVMs that were formally registered as private or individually-operated were usually smaller mines (cf. Wright 2000a: p. 130).

Whatever the predominant ownership form in the 1980s, in the 1990s most of the collectively-owned mines were "contracted out" (承包) to private operators (Su 2002: p. 88, Fn. 19; Wright 2012: p. 98). From the mid- to late-1990s onwards, many of the smaller local state-owned mines, too, were privatized. By the 2000s, all sources – media articles, interviews, academic studies – consistently speak of the TVMs as *essentially* private enterprises, in the sense that control rights and rights to the residual were controlled by one or more private investors, who also frequently resold these rights among each other.

Like the original rise of the TVMs, this again mirrored larger trends seen across the entire TVE sector, not just in mining: After 1992, political constraints on formally private ownership increasingly fell away, at least in non-strategic industries, and at the same time growing competition made ownership less attractive to local governments. Across all industries, mass privatization of collectively-owned TVEs now ensued (Li and Rozelle 2003, Li 2005, Ong 2012). In coal, significant price declines after 1995/96 made continued direct ownership a particularly unattractive proposition for local governments.

As explained in Chapter 4, property rights within the TVM sector nevertheless remained extremely complicated. While political *practice* – especially at the county, township

(乡镇) and village (村) level – was very solicitous and accommodating towards private investment, operational control and ownership of coal mines, the *formal* regulatory framework was much less so. This does not seem to have reduced the flow of private investment into the industry, but as we will see it tended to push it into complex and opaque ownership structures. “Contracting out”, whereby the mining rights formally remained the property of the village but were then “leased” to private operators (who often sold or leased these on further) are an example of this. It is worth emphasizing that these phenomena were hardly unique to coal mining: Across industries, political and regulatory discrimination has tended to push private entrepreneurs in China into complex ownership structures that often involved masquerading as collectively-owned firms (“red hat” enterprises).

As we will see in Chapter 4, regulatory change in 2004/2005 somewhat eased the situation, by creating greater scope for formally selling mining rights to privates and at this point most TVMs operated under “contracting out” structures seem to have also formally become private property.

2.4.5 Competition with SOEs and Unstable Coal Markets

Historically, TVMs have generally had substantially lower operating costs than the local and key state mines, especially in the traditional centers of coal production in central, northeastern and southwestern China where underground mining predominated. The reasons for this were their labour-intensive mode of production, use of cheaper labour (unskilled rural migrants), and tendency to skimp on safety and pollution-control equipment and standards. Many KSOMs were also burdened with large legacy social costs. Nolan (2001: p. 722) provides data suggesting that TVMs might have had costs about 60% lower than state mines in 1995. Data compiled by a senior researcher and policy advisor from the Shanxi Development and Reform Commission comparing costs and sales prices of Shanxi KSOMs with a “representative” TVM (典型样本) suggest that in the mid-2000s in Shanxi TVMs might have had production costs 40-62% lower than KSOMs, and may have sold their coal at prices 14-40% cheaper than the KSOMs⁷ (Wang and Horii 2008: pp. 34-42; cf. Tu 2011: p. 15). As long as demand for coal was greater than coal production – that is, for most of the 1980s and the 2000s – this was not much of a problem. During market downturns such as occurred in the mid- to late 1990s, however, competition between TVMs and state mines became acute, and due to their cost advantages TVMs tended to win, at least in the 1980s and 1990s (Wright 2000a, 2000b, 2007). (In the 2010s this began to change; see below.)

⁷Note that Wang and Horii do not compare relative coal qualities, so the price comparison is inexact at best. However, Chinese industrial coal consumers seem to be often more price- than quality-sensitive, and such buyers may have often been willing to tolerate lower quality in return for lower prices (Steinfeld et al. 2008).

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While economic downturns should usually lead to industry consolidation, this appears not to have happened on a significant scale in coal, at least not until the 2010s (and even then possibly only in some regions). State mines tended to keep operating, even when loss-making. This was due to their higher fixed costs (because of their more capital-intensive mode of production), softer budget constraints, and political imperatives to preserve employment (Wright 2000a, 2000b, 2007).

TVMs would exit when loss-making, but their lower fixed and variable costs, relative to state mines, seem to have often allowed them to remain minimally-profitable, even during downturns. Certainly, large numbers of TVMs seem to have kept producing during the late-1990s downturn (Wright 2007). Coal's nature as a relatively undifferentiated commodity (especially when most coal-buyers' operations are fairly backward and not dependent on high-quality coals) made differentiation on the basis of factors other than price difficult. Therefore downturns were met with reciprocal cost-cutting by all, rapidly destroying margins – something the state mines suffered from most. Due to the fragmented structure of the industry, cartelization was not really feasible (though attempts were made in the late 1990s) (Wright 2007). This phenomenon is not unique to China; as long as a fragmented small-scale mining sector existed in Australia and Canada, downturns regularly led to “ruinous competition” among coal producers in both countries (Bowden and Barry 1998; Bowden and Molloy 2002).

As we will see in Chapter 5, in the 2010s this began to change, as the coal industry's migration westward altered price dynamics. In the 2000s very large new coalfields were developed in northern Shaanxi and western Inner Mongolia, which hitherto had been relatively marginal producers. In 2011, these two provinces accounted for 34% of national coal production, compared to only 11% in 2000. The 2000s saw very strong growth of the private/TVM sector in these provinces also, but the underlying economics appear to have nevertheless been more favorable, structurally, to the SOEs present there, for two reasons. Firstly, the northwestern coalfields are large and shallow. Well-resourced centrally-owned SOEs like Shenhua and China Coal constructed very large opencast mines, giving them significant scale economies and thus cost advantages compared to smaller local private players and TVMs and SOEs elsewhere in the country (Cornot-Gandolphe 2014). Secondly, they enjoyed favored access to the centrally controlled railway system to transport coal, yielding further cost advantages compared to the local TVM sector, which had to rely on trucks. Due to the remoteness of the northwestern coalfields, transportation meant that the northwestern TVMs had the highest total costs in the industry nationally (Cornot-Gandolphe 2014). As long as coal prices remained high, this was not a problem, but when coal prices collapsed after 2011/2012, the northwestern privates were among the hardest hit and by 2014 many seem to have been going out of business (cf. Chapter 5).

2.4.6 Accidents

During the 1990s and 2000s China's coal industry was the most dangerous in the world. From 1995 to 2011, at least 86,747 workers died in coal-mine accidents. The reasons for this are partly geological: outside of Northern Shaanxi, Inner Mongolia and Xinjiang – all areas with relatively good accident records – China's remaining coal reserves tend to be deep, have high gas contents, and are prone to flooding. But societal, economic and political factors are important, too. Investment in safety equipment has been low historically (something indicated by the frequency of accidents from gas explosions; a problem to which technical solutions have existed for almost 100 years and which is very rare in advanced-country coal mining today). While a safety inspectorate was created in the 2000s, it remains understaffed relative to the scale of its task (tens of thousands of mines) and prone to corruption. The industry also has struggled to attract skilled employees. Particularly in the TVM sector, the labour force largely consists of peasant migrants with little or no training (*China Labour Bulletin* 2008, Wang 2006, Wright 2004, Wright 2012).

These problems are present across the industry, but they cluster in the TVM sector. Figure 2.3 shows the number of fatalities from accidents per million tons of coal mined for KSOMs, LSOMs and TVMs. While the fatality rate for all types of mines has declined steadily, at all times it remained significantly higher in the TVMs than in the other types of mines. While underreporting of accidents was certainly common throughout the time period (though probably less after 2004/2005, due to increased monitoring by state agencies and the media) there is no obvious reason why underreporting should have been systematically higher in KSOMs than in TVMS. If anything, the reverse may have been the case.⁸

2.4.7 Pollution

Poorly regulated coal mining can cause serious damage to the environment and public health through soil subsidence, the disappearance or pollution of rivers, streams and underground aquifers, and the release of toxic waste and coal dust. These problems were serious in all of the major coal provinces in China (Interview 78;⁹ cf. Yulin

⁸Small accidents (~1–3 fatalities) in particular seem to be also frequently covered up at large state mines. That at least was the view of a well-placed individual who had worked for long years in a relevant department, whom I was able to interview. However, TVMs are frequently located in remote locations, which should facilitate covering up even relatively large accidents, especially as local governments are likely to be eager to help with the cover-up. A former private coal-mine owner indeed told me that I was a fool if I believed that the official accident statistics captured all fatalities (Interview 81).

⁹Chinese academic (geologist) who does much consulting for the state and major firms on mining-related topics, esp. post-mining reclamation and pollution control.

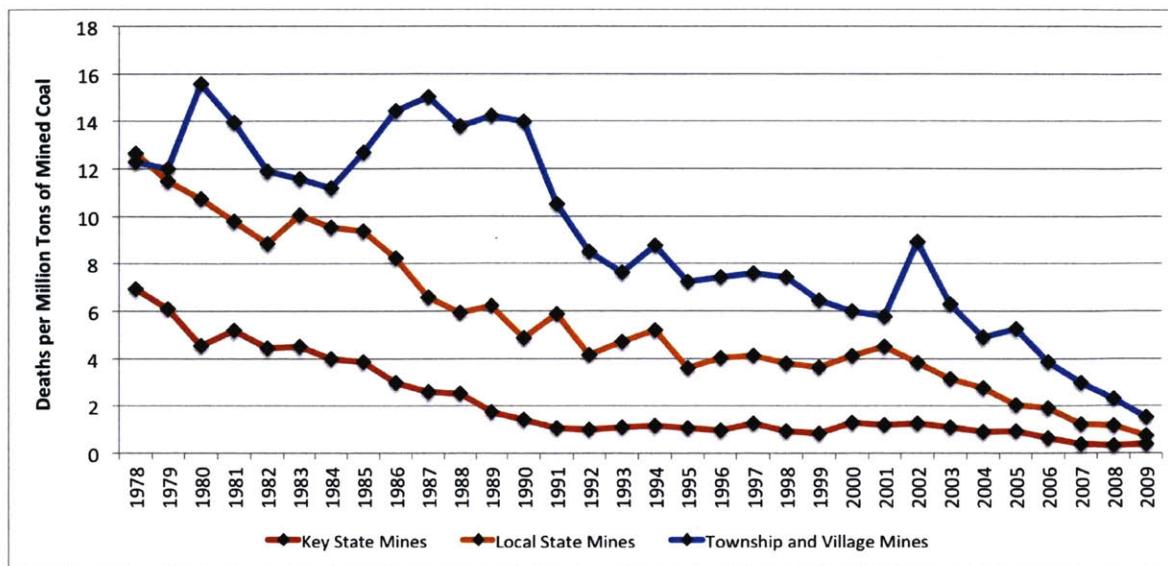


Figure 2.3: Fatality Rates in Mines of Different Ownership Categories, 1978 – 2009

Sources: IEA 2009, CCIYB 1994-2009, ECIDC 2010, Wright 2012.

Note that the TVM death rates for the years 1994 - 2004 are based on the revised output data for the TVMs calculated by Wright (2012). I am indebted to Tim Wright for kindly permitting me to use his data.

2006, *Economist* 2012a), but especially so in Shanxi, historically, China's largest coal province. In the mid-2000s Shanxi had several of the world's most polluted cities in the mid-2000s. Rates of cancer and birth defects were well above national average – with the highest rates found in the mining areas – and over 90% of the province's surface water was polluted. Internal reports quantified the total environmental damage from coal mining and refining to the province at RMB 600 bn (*Caixin* 2012).

While officials were aware of many of these problems – accidents, industrial fragmentation, pollution, low levels of resource extraction – from a very early date, it was only gradually that they led to significant changes in the central government's policy approach to the industry, though eventually they did. This is the topic we turn to next.

2.5 Policy In the 1990s: Building Up SOEs and Reducing the TVM Sector

Zhao Ziyang and Hu Yaobang had both supported the TVM sector. In 1989, however, Hu died and Zhao fell from power. They were replaced first by conservatives around

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Li Peng and Chen Yun, and then after 1992 by the neo-conservative Shanghai group of Jiang Zemin, Zhu Rongji and Wu Bangguo. There were significant differences between these groups. Chen and, until circa 1992, also Li wanted to preserve the traditional planning apparatus and roll back market reforms, while the more Dengist Zhu and Jiang wanted to press ahead with market reforms and move to Japanese, Singaporean and Korean-style approaches to economic development based on indicative planning and industrial policy within an overall context of markets, while retaining state ownership of key industries and enterprises (Fewsmith 2008, Heilmann and Shih 2012, Huang 2008). But whereas Hu Yaobang and Zhao Ziyang had seen private entrepreneurship (as well as political reform) as the key to development, both groups of their successors instead emphasized state-led industrial policies to build up large and preferably state-owned national champions and believed that retaining strong levers of central control over the economy – including direct ownership of strategic industries and firms – was crucial for China's development (Eaton 2013, Heilmann and Shih 2012, Huang 2008, Nolan 2001, Sutherland 2001). The subsequent administration of Hu Jintao and Wen Jiabao reversed some of Jiang and Zhu's priorities but shared their beliefs about industrial policy focused on the creation of national champions and accelerated such programs (Heilmann and Shih 2012, Naughton 2011a).

Policy towards the coal industry, however, evolved only gradually. On the one hand, even in the 1980s the State had thrown substantial support behind the creation of large SOE mines (Section 2.5.1). As we will see in Section 2.5.2, the *Eighth Five-Year Plan* drawn up under Li Peng in 1990 signaled greater support for the SOE mines. The central government also became more concerned over the problems in the TVM sector and tried to bring it under a stronger regulatory framework. But until the late 1990s the Center remained basically supportive of the TVMs, seeing them as useful swing producers that could expand coal production cheaply and quickly. The main policy concern during the 1990s were the large losses run up by state mines and making them fit for market competition.

It was only in the late 1990s that the central government turned decisively against the TVMs (Section 2.5.3). This policy change was brought on by the effects of the late-1990s downturn in the coal market, which pitched the interests of TVMs and SOEs against each other in a much more direct way than before as both competed for market share. The government responded with a large campaign to close down much of the TVM sector. As we will see in Section 2.6, it was in this context that officials moved to spell out a new and more systematic vision for the coal industry based around consolidation under large SOEs. To help guide the reader through this and the following sections, Table 2.1 summarizes the evolving coal-industry policies and priorities of the different administrations.

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Time	Administration	Policy Focus
1983 - 1989	Hu Yaobang	Increasing coal supplies by permitting TVM entry.
	Zhao Ziyang	“Directional liberalism” focused on developing private sector
1990 - 1997	Jiang Zemin	Stemming SOE losses, initial attention to TVM problems (safety, pollution, etc.)
	Li Peng	“Directional statism” focused on building up SOEs as national champions, including in coal.
1998 - 2001	Jiang Zemin	Stemming SOE losses, (failed) nationwide campaign to close down TVMs during late-90s Deflation
	Zhu Rongji	“Directional statism”
2002 - 2012	Hu Jintao	Solving TVM Problems, esp. safety, through consolidation, closure, and tightened regulation of TVMs.
	Wen Jiabao	“Directional statism” remains strong, but also submerged debates over value of state ownership

Table 2.1: Coal-Industry Policies and Priorities of Different Administrations

2.5.1 1980s Antecedents

Even in the 1980s, encouraging the TVM sector formed only one plank – if a key plank – of China's energy and coal-development strategy. In parallel to this the government invested substantial resources into building up large coal SOEs. This is reflected even in the founding document of the *Let Water Flow*-policy, the 1983 State Council Notice, which argued that “developing the coal industry must adhere to a policy of ‘walking on two legs’” (必须坚持‘两条腿’走路的方针) with Key State Mines being developed simultaneously with TVMs and local state mines. Contemporary policy slogans usually encapsulated this dual approach. For instance, in 1984 Shanxi province was exhorted to “Develop Large [State] Mines in a Big Way, Liberalize Small Mine [Development]; Have the State, Collectives and Individuals all Simultaneously Develop Mines” (大矿大开, 小矿放开, 国家、集体、个人一齐办矿) (PD 1984d).

Indeed, for China's two largest and strategically most important coal-mining projects of the 1980s – the Shenfu Dongsheng field in Northern Shaanxi and Inner Mongolia and the Pingshuo/Antaibao mine in Shanxi – the state created new SOEs directly under the central government; Pingshuo First Coal (today, China Coal Group) and the Fine Coal Corporation (today, Shenhua Group). It did not simply hand over these coal fields to private developers (though much private development did take place in them anyway, especially in the Shenfu Dongsheng field). Both received tremendous financial and political support. Antaibao was a joint venture with Occidental Petroleum negotiated directly between Occidental's chairman, Armand Hammer, and Deng Xiaoping (Lardy 2002: p. 1).¹⁰ When the agreement was signed in 1983, it was the largest Chinese-foreign joint venture ever, and was intended by the Chinese side as a demonstration of the security of China's investment environment. The total size of the project was about US\$ 649 million (m) (Thompson 2003: p. 114–5).

The Shenfu Dongsheng project was even larger, and did not involve a joint-venture partner. The project officially dates to 1984, when the government set up the Fine Coal Company (精煤公司) with “overall responsibility” for developing the field, though serious development seems only to have begun in 1988. Between 1985 and 2005, the total investment in the Shenfu Shendong project from state budgetary outlays and loans from state banks and Japan amounted to US\$ 9.2 bn, apparently the largest single investment project in China's modern history, though much of this may only have flown after 1991, when the Eighth Five-Year Plan identified Shenfu Shendong as a key construction project, or after 1995, when Fine Coal – until then a subsidiary of Huaneng, a major power producer – was spun off to form the Shenhua Group, which was once again placed under direct central-government ownership (Nolan 2000: pp. 734–35, 740–46; Rui et al. 2010: pp. 24–31; Zhao and Xu 2012).

¹⁰Occidental sold its share to the Chinese side in 1991 (Thompson 2003: pp. 145, 157). A statue of Hammer and Deng still stands in the main square of Shuzhou City, where Antaibao is located.

While these projects demonstrate that the 1990s policy turn towards focusing on building up large coal SOEs had antecedents in the 1980s, as discussed above in that decade policy overall had still been supportive of the TVM sector. After 1989 this gradually changed.

2.5.2 The Eighth and Ninth Five-Year Plans (1991–2000): SOE Losses and TVM Rectification

The *Eighth Five-Year Plan* (1991 to 1995) expressed these differences. While the foregoing *Seventh Plan* drawn up under Zhao Ziyang had stressed the construction of small and medium-sized mines over that of large SOE mines, the *Eighth Plan* reversed these priorities. Now, it was the construction of KSOMs that was to be “sped up”. The *Plan* included a list of 15 major state mining and mining-related railway projects that were to be prioritized. The TVM sector was mentioned only in one part-sentenced, which called for it to be “reformed and upgraded” (改造和提高) (State Council 1991). Energy Vice-Minister Hu Fuguo’s (胡富国) March 1991 speech setting out the *Plan*’s priorities for the coal industry focused almost entirely on the KSOM sector. The central concern of the speech was raising the state mines’ production efficiency, weaning them off central-state subsidies and reducing losses, and increasing their level of mechanization. TVMs were little mentioned, and when, then critically: “chaotic mining” (乱采滥挖) by small mines within KSOM mining areas was seriously affecting safety at the latter (Hu 1991 in CCIYB 1991).

Five Years later, the *Ninth Five-Year Plan* contained similar priorities: it called for constructing “a batch of backbone [state] mines (骨干矿井) with high productivity, high efficiency and low staffing”. State mines were to raise their profitability and transform their management mechanisms (i.e., become more market-orientated), with technological progress the key to increasing production and productivity . Meanwhile, TVMs were to be “fostered, transformed, rectified, united, and upgraded” (扶植, 改造, 整顿, 联合, 提高) (State Council 1996).

As the language of “transforming, rectifying and upgrading” indicates, by the early 1990s the Center had come to view the TVMs as creating as many problems as they solved, and sought to bring them under a stronger regulatory structure and control their unchecked expansion. In March 1994 the State Council held a conference on the TVMs, at which serious concern was expressed by Vice-Premier Zou Jiahua (邹家华) over the problems in the TVM sector, especially TVM encroachment on SOEs’ mining concessions. The conference resolved that mines without the requisite licenses or basic safety equipment were to be shut down. Local governments were to carry out inspections of mines in their areas, with mines that did not meet standards upgraded or closed (Su 2002: p. 102; Rui 2005: p. 70). The conference set out a “10 Character Policy”

(十字方针) on TVM development. They were to be “fostered, transformed, rectified, united, and upgraded” (扶植, 改造, 整顿, 联合, 提高) (CCIYB 1995: p. 103). 200 investigators were dispatched across the country to monitor local implementational (Su 2002: p. 102).

The State Council followed this up in December 1994 by issuing *Regulations on the Management of Township and Village Mines*. The document prohibited mining by TVMs in areas that were under state planning or contained coals of high value, as well as in the vicinity of important rivers, infrastructural, industrial and military installations. TVMs had to be “consistent with the state’s coal industry development plans” (符合国家煤炭工业发展规划), utilize approved mining equipment and techniques, meet state safety and environmental regulations, and could only be run by mine managers (矿长) who had received relevant training and licenses (矿长资格). Mines, the *Regulations* re-emphasized, had to obtain a mining license (采矿许可证) and a coal production license (煤炭生产许可证). County (县) authorities were responsible for checking whether mines and their managers met these requirements. Violators could be fined up to RMB 50,000 and ordered to stop production (State Council 1994).

Two weeks later, in January 1995, Vice-Premier Zou echoed these themes in a speech to coal-industry and local-government representatives. Zou noted that the TVM sector was plagued by a lack of scale economies and chaotic and unsafe mining practices that wasted coal resources. Greater efforts had to be made to “clean up and rectify” the TVMs (Zou 1995 in CCIYB 1995: pp. 103–4). The *Ninth Five-Year Plan* (1996–2000) re-affirmed the 1994 “10 Character Policy” as the means to “achieve rational development according to standards” and an “orderly and healthy development path” for the TVMs (实现正规合理开发, 走上有序健康发展的轨道) (State Council 1996). Elaborating on the aims of the Plan, Coal Industry Minister Wang Senhao re-emphasized the need to “clean up, rectify and comprehensively raise the quality” of the TVMs (抓好清理整顿, 全面提高乡镇煤矿的素质) and called for using “legal and administrative means as well as the formation of sales combines” to prevent “blind production increases” by the TVMs (Wang 1995 in CCIYB 1996: pp. 59, 60). Finally, in 1996 the Coal Law (煤炭法) was passed, which reaffirmed the provisions of the 1994 *Regulations*.

2.5.3 Policy Turn against the TVMs during the late-1990s Deflation

While the state in the early 1990s thus manifested a greater concern with the negative consequences of TVM mining and stepped up efforts to control these, it would be wrong to see these efforts, at this point, as marking either a *fundamental* turn against the TVM sector, or as suggesting that the problems created by the small-scale mines were the central concern of policy makers responsible for the coal industry. While concern over the TVMs had grown, they remained useful tools to grow coal supply,

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especially once the rapid growth unleashed by the renewal of market reforms in 1992 necessitated large increases in coal output. In 1996, the *Ninth Five-Year Plan* still set a goal of *raising* TVM output to 610mt by 2000 (42% of planned production), up from 590mt in 1995 (Wang 1995 in CCIYB 1995: pp. 57, 59). In 1995 the *People's Daily* ran a front-page story about Premier Li Peng visiting a TVM in Shanxi. The article praised the achievements of the “peasant mine boss” (农民矿长), and by implication the achievements of the TVM sector as a whole (*PD* 1995).

Rather than the TVMs, the main concern of coal-industry officials in the early and mid-1990s were the coal SOEs’ large losses and need for state subsidies. By the early 1990s most KSOMs were loss-making (Wright 2000: p. 358). Coal Minister Wang claimed that total KSOM losses in 1992 were RMB 5.8 bn, RMB 2 bn in 1993 and 1994 respectively, and for 1995 he forecast losses of RMB 1.4 bn (Wang 1995: p. 56). The importance of eliminating these losses, making the coal SOEs more efficient, market-oriented and profitable, and reducing KSOM staffing were the dominant themes in the speeches of the coal ministers and state councillors setting out the priorities for the *Eighth* and *Ninth Five-Year Plans* (Hu 1991, Zou 1995, Wang 1995).

The (relatively) complete deregulation of coal prices in 1993 helped reduce losses, as coal prices¹¹ rose 85% between 1991 and 1995. Data compiled by Wright (2006; 2012: pp. 67–72) suggest that the state-mine sector in fact briefly went into the black in 1995 and 1996 (contrary to Minister Wang’s claim).¹² This soon changed, however, with the onset of economy-wide deflation in 1996/1997, subsequently exacerbated by the Asian Financial Crisis. While national figures for ex-mine prices only show a 10% decline between 1997 and 2000, other data suggest much more dramatic price falls. At Qinhuangdao (秦皇岛), China’s most important coal port, prices fell by about a third between 1996 and end-1999 (Wright 2012: p. 80). In Shandong, one of the large coal-producing and consuming provinces, prices fell 40% between 1996 and 2000 (*ibid.*). KSOM losses jumped back to RMB 3.71 bn in 1998 and RMB 2.28 bn in 1999 (Thompson 2003: p. 226). By mid-1998, 52 SOE mines owed workers a total of RMB 3 bn in unpaid wages (Wright 2000b: pp. 366–7).

In this context central-government policy turned sharply against the TVM sector, in an effort to support coal prices by reducing output. Efforts to inspect and close “illegal” TVMs (i.e., those without the requisite licenses or unsafe working conditions) were stepped up in 1997, with several national conferences held to mobilize local-government action (Su 2002: pp. 101; 103–104). As the industry-wide downturn continued, the Center launched a major campaign to “close shafts and suppress production” (关井压产) in late October 1998. The State Council set a goal, for the end of 1999, of closing 25,800 small mines that were “illegal” or “structurally irrational” (布局不合理),

¹¹The price for coal supplied to power plants (the KSOMs’ most important customers) was only partially decontrolled.

¹²Data compiled by Thomson though basically supports Wang’s figures, and shows a loss of RMB 1.03 bn for 1995 and RMB 610m in 1996 (Thomson 2003: p. 226).

a vague term that was not closely defined but seemed to refer mainly to small mines that “affected the long-term development of state-owned coal mines” (影响国有煤矿长远发展) (State Council 1998). Coal production was to be reduced by 250mt (*ibid.*). This was equal to 19% of total coal output in 1997 and 44% of TVM output,¹³ and roughly the amount of coal in storage by late 1998 (Wright 2007).

While the State Council *Notice* initiating the campaign only spoke of “small mines” (小煤矿) as the targets of the campaign, leaders were clear about which sector of the industry was meant by this. For instance, Wu Bangguo, the Vice-Premier overseeing the campaign, stated in a key speech that “the majority of the mines affected by the campaign are township and village and individually-operated mines” (从这次关井压产的范围看, 所涉及的大部分是乡镇煤矿和个体煤矿) (Wu 1998).¹⁴ (In any case, as discussed above, the “small mines” and the TVM sector were largely coterminous.)

The close involvement of Premier Zhu Rongji and Vice-Premier Wu Bangguo in the campaign indicated the importance attached to it by the state. In 1999 and 2000 four national mobilization conferences were held for officials at all levels, and central-government inspection teams made multiple tours of the localities to supervise implementation (Su 2002: pp. 170–171). The campaign took place across the whole country, but the focus was on five provinces; Shanxi, Inner Mongolia, Henan, Guizhou and Heilongjiang (then still a major coal-producing province), where 39% of the planned mine closures and 64% of intended output reduction was to come from (Wu 1998).¹⁵

The targets for closure and output reduction were duly declared to have been achieved – the *Tenth Five-Year Plan* claimed 47,000 “small mines” to have been closed with output reduced by 350mt (State Council 2000) – but in fact there are serious doubts over this and today the campaign is generally acknowledged to have failed, including in China. This is discussed further in Chapter 4. Of interest here is the changed perspective on the coal industry that emerges from the campaign, which we turn to next.

2.6 Spelling Out a New Vision for the Coal Industry: Towards the Tenth Five-Year Plan and After

On the one hand, the closure campaign was a short-term response to dislocations in the coal market, aimed at restoring SOE profitability by forcing the adjustment costs from deflation onto others (TVM owners and workers, local governments and rural

¹³Calculated from the data provided in IEA (2009: p. 327, Table I D)

¹⁴The remainder were small mines operated by larger key and local-state coal SOEs (Wu 1998, State Council 1998).

¹⁵The only one of the case-study provinces not included, Shaanxi, was not yet a significant coal producer in 1998.

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communities). The centrality, at least in the short-term, of this concern is made clear from the importance the campaign gave to reducing total output (to support prices and thus SOE finances) and from leaders' statements. Wu Bangguo (1998) argued that "the fundamental solution to the coal industry's troubles [meaning mounting SOE losses] ... lies in solving the problem of excessive coal production" (要从根本上解决煤炭行业的困难...出路在于解决煤炭总量过剩的问题).

On the other hand, Wu's speech and the 1998 State Council *Notice* described the campaign as about more than just stabilizing coal markets. Both argued that the existing structure of the industry, specifically the large small-mine/TVM sector, posed a fundamental obstacle to its longterm development. As the *Notice* put it,

The small mines' blind development (盲目发展), low quality and duplicate structures, illegal production, chaotic mining practices (乱采滥挖), environmental destruction and resource wastage as well as their many accidents is a relatively serious problem, and has become the main obstacle to coal-industry development.

Beyond "bringing coal production and demand back into balance", the closure campaign would "promote rational development and usage of coal resources, adjust and optimize coal industry structure, standardize and bring order to coal production ... increase work safety, and promote the industry's healthy development." (State Council 1998). Wu Bangguo (1998) told his listeners that closing illegal and irrational small mines and those that mined "chaotically" would permit "modernized mines to go full steam ahead" and "enable the function of the Key State Mines to be fully brought into play" (充分发挥国家重点煤矿的作用, 让现代化矿井开足马力生产). Indeed, the current market downturn was an *opportunity* to "rectify coal production order": "Closing shafts and reducing production" would "promote the growth and *quality* of the coal industry and *optimize* the allocation of coal resources" (which would now mainly come under the control of modern SOEs) (目前煤炭市场是供大于求, 为整顿煤炭生产经营秩序提供了条件。实行关井压产...会提高煤炭工业经济增长质量和资源的优化配置) (Wu 1998, my italics).

The *Tenth Five-Year Plan* (2001–2005) drawn up under Premier Zhu Rongji included a detailed separate plan for the coal industry that expressed this vision more systematically (State Council 2001). It is worth noting that Wu Bangguo will almost certainly have played a key role in drafting this plan, since Wu was the Vice-Premier in charge of industrial work at the time, had directed the 1998 TVM closure campaign, and was also the secretary of the Commission for Centrally-Owned Enterprises Work (中央企业工作委员会; the main body directing the country's national-champions strategy).¹⁶ This

¹⁶On the remarkable consensus that had formed among China's policy elites in the 1990s and 2000s about a development strategy focused on building national champions – and preferably state-owned ones at that – see Eaton 2013 and Heilmann and Shih 2012.

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is important, because while Wen Jiabao would take over the economics and industry-related portfolios after 2002, Wu – and not Wen – was the second-ranked leader after Hu Jintao throughout the Hu-Wen period. In other words, at the very top of the state was an individual committed to a development strategy for the coal industry focused on large SOEs.

The preamble argued that the *Tenth Plan* period was a crucial point in time for adjusting the coal industry's structure and called for developing it through a fourfold strategy of “creating large enterprise groups, developing advanced coal [mining] and clean coal technologies and comprehensive management approaches”.

While the *Plan*'s fascination with developing advanced mining and clean-coal technologies – especially, technologies for deep mining, coal liquefaction and gasification, and the utilization of coal-bed methane – need not detain us here, it is important to note that the *Plan* expected precisely the “large enterprise groups” to be the key institutions that would develop and commercialize these technologies. This belief in the role of large enterprises as drivers of innovation and national competitiveness helps explain the insistence of this and subsequent Five-Year Plans on the importance of industry consolidation and building up large enterprises. The subsequent *Eleventh Five Year Plan for the Coal Industry* shared with the *Tenth* this strong interest in developing advanced coal technologies and the belief that the large-scale enterprises could and would play a central role in the technology innovation system. The prevalence of this belief in the key role of large firms within Chinese economic policy-making circles is increasingly well attested (cf. Nolan 2001, Heilmann and Shih 2012, Eaton 201). A 1998 speech by Wu Bangguo is worth quoting at length because it cogently expresses these beliefs and indicates their prominence within the central state:

In reality, international economic confrontations show that if a country has several large companies or groups it will be assured of maintaining a certain market share and a position in the international economic order. America ... relies on General Motors, Boeing, Du Pont and a batch of other multi-national companies. Japan relies on six large enterprise groups and Korea relies on 10 ... our nation's position in the international economic order will be to a large extent determined by the position of our nation's large enterprises and groups. (Quoted in Nolan 2001: p. 71)

The *Plan* went on to note that globally the coal industry had been undergoing a wave of mergers with enterprises becoming ever bigger and thereby increasing their competitiveness while deploying advanced technology to raise productivity. By contrast, the *Plan* complained, China's industry was hobbled by fragmentation: While China had the world's largest coal industry by total output, its mines produced only 30,000 tons of coal per year on average. Even the KSOMs had average production capacities of only

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800,000 tons, which was just one third of that achieved in “advanced coal-producing countries”. China’s four largest mining companies had a combined market share of just 9%, while in advanced countries the largest four companies usually took around 40% market share. Meanwhile, their equipment was outdated and mechanization levels low, with SOEs suffering from significant overstaffing. The result was low efficiency, low or negative profits, wage arrears, and resource wastage (State Council 2001).

In response, the *Plan* called for consolidating the industry to “develop a batch of large enterprises and enterprise groups that would play a key role both in balancing domestic coal supply and demand and in international competition”. By 2005, industry concentration was to be “clearly raised” with the eight largest enterprises achieving a combined market share of 35%. “One or two” enterprises with production capacity of 100mt and “five to six” with capacity of 50mt were to be created through mergers among coal firms. Particular stress was placed on building coal enterprises that would integrate mining, transport, and power production (State Council 2001).

Structural adjustment of the industry was to proceed by a mixture of promoting mergers among SOEs, closing “backward production capacity” (淘汰落后生产能力, a phrase that referred mainly to TVMs) and “upgrading” (改造) legal small mines. The *Plan* noted the success achieved during the *Ninth Plan* in closing small mines, but warned that while “mining and production-management order” (办矿秩序和生产经营秩序) had “taken a turn for the better” (趋于好转), so far only “the beginning of a stop” had been put to small mines “mining wherever they please, mining across boundaries of mining concessions, and mining chaotically” (小煤矿随意布点、越层越界、乱采滥挖现象得到初步遏制).

Accordingly, the *Plan* called for “strictly managing” mining licenses and strengthening safety inspections. Small mines that “mined illegally, had low recovery rates, imperilled safety at large mines, did not meet basic safety conditions, or seriously polluted the environment”, were to be shut down. Minimum standards were set for new mines: they were supposed to have recovery rates no lower than 50% and annual capacity of at least 150,000 tons in Shanxi, Shaanxi and Inner Mongolia, 60,000 tons in Henan and Guizhou and other Central and South-Western Provinces, and 90,000 tons elsewhere, though smaller shafts remained permissible for thin coal seams. They were not supposed to use manual extraction methods, had to have multiple exit tunnels and were not allowed to mine coal that exceeded state regulations on sulfur content. Legal small mines were to be “upgraded”, meaning that they were to increase production capacity of single shafts, reduce their shaft numbers overall, raise extraction rates and modernize their production equipment and reach safety standards.

While contemporary Chinese Five-Year Plans generally contain a small number of specific quantified targets, they must be understood primarily as vision statements in which a government sets out its priorities and the “path of thought” (思路) and “spirit” (精神)

guiding and animating its policies. They are not detailed operational instructions.¹⁷ As we will see in Chapter 4, until 2004/2005 – when the *Plan* had almost run its course – the case-study provinces seem to have made few moves to act on these *Plan* demands for tightening regulation and oversight over the TVM sector and closing “backward” small mines. On the contrary: In all of the case-study provinces, the years 2002–2004 saw TVM output grow at up to 160%, as mines that had been closed during the 1998 Campaign came back on stream. Moreover, when in 2004/2005 provincial actors indeed began tightening regulatory oversight and closing mines, this seems to have had less to do with the existence of the *Tenth Plan* as such than with the rather abrupt eruption of work safety as a serious public and political concern, which both led to renewed and more forceful central-government intervention, and the growth of a new source of political pressure in form of media coverage (cf. Chapters 3 and 4).

The fundamental reason for the resurgence of TVM output in the 2000s was that economic growth and thus coal demand raced ahead, far exceeding officials’ expectations. The *Tenth Plan* had predicted average GDP growth of 7% per annum from 2001 to 2005, and an annual increase in coal demand of only about 20mt. In fact, average annual growth rates were about 10%, with growth becoming increasingly energy intensive. Coal consumption grew accordingly – on average, by just under 180mt annually across the Plan period, *nine times* what planners had foreseen (EIA n.d.) – as did production: by over 1.15 billion tons. TVM production grew to 835mt, exceeding the sector’s pre-closure campaign high point of 615mt in 1996. While it is hard to get data for total market size and thus difficult to assess whether the target of having the top eight firms take a combined market share of 35% by 2005 was achieved, the data for *output* shares suggest this is extremely unlikely, something suggested also by the fact that mention of this target was quietly dropped from the *Eleventh Five-Year Plan*. In 2004, the top eight producers still only had a production share of 17%, and of 28% by 2008 (Wright 2012: p. 77). Before examining these developments on the ground in Chapter 4, however, we turn to central-government coal-industry policy under Hu Jintao and Wen Jiabao, who succeeded Jiang Zemin and Zhu Rongji in 2002.

2.7 Coal-Industry Policy under Hu Jintao and Wen Jiabao

Policy under Hu and Wen was put forth in two key documents; the 2005 State Council *Opinion on Encouraging the Healthy Development of the Coal Industry* (State Council 2005a) and the 2007 *Eleventh Five-Year Plan for the Coal Industry* (NDRC 2007).

¹⁷The substitution of the word “guihua” (规划) for the traditional “jihua” (计划) in the title of these documents bears testimony to this. While both words are commonly translated as “plan”, *guihua* connotes a longer term, more strategic and macro-level “program”, rather than, as *jihua* does, a set of detailed operative instructions. Cf. Cao et al. (2006), Naughton (2005b), Sigley (2006) and Vogel (2011: p. 366, Fn. 6).

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These documents shared the analysis of the industry's problems contained in the Tenth Plan and the documents surrounding the 1998–2000 closure campaign. In language near-identical to that used by Wu Bangguo in 1998, the 2005 *Opinion* declared that

“irrational [industry] structure, an extensive mode of development, low technological and scientific levels, frequent accidents, serious resource wastage, insufficient environmental treatment and protection, and [poor] historical legacies are all prominent problems in the [current] development of the coal industry (煤炭工业发展过程中还存在结构不合理、增长方式粗放、科技水平低、安全事故多发、资源浪费严重、环境治理滞后、历史遗留问题较多等突出问题).”

These problems were concentrated in the TVM/small-mine sector (State Council 2005a). The *Eleventh Plan* offered a very similar analysis to the *Opinion*. These problems were particularly worrying because, as the *Plan* argued, coal was “China’s main source of energy” accounting for 76% of domestic primary energy production and the industry thus “a basic lifeline industry for the national economy and national energy security” (煤炭是我国的主体能源，煤炭工业是关系能源安全和国民经济命脉的重要基础产业) (NDRC 2007).

The Hu-Wen administration shared the foregoing administration’s analysis of the problems in the coal industry and espoused broadly the same approach to resolving them, namely reducing the share of the small-mine/TVM sector and consolidation the industry under large enterprises. Indeed, consolidation now emerged as a much more prominent approach for tackling the small-mine problem. Hitherto, policy had sought to resolve the TVM problems either through stricter regulation or by closing them. Under Hu and Wen, consolidation – having large enterprises take over the small mines, or getting them to merge among each other – was emphasized (and eventually implemented) much more forcefully than it had been during the *Ninth* and *Tenth Plan* periods (1995–2005). I discuss this in Section 2.7.1 below.

During the Hu-Wen years central-government policy pronouncements and actions also saw a much stronger emphasis on mining safety than during the foregoing period. Safety now emerged as a crucial policy concern. This is addressed in Section 2.7.2.

Finally, the question of state ownership was addressed much more directly, without a formal consensus emerging, however. Rather, a series of contradictory pronouncements were made both by senior officials (albeit usually speaking in semi-official capacities) and in central-government documents (State Council *Opinions*, *Five-Year Plans*). While some of these pronouncements openly articulated a preference for state ownership and greater state control of coal mining and other “life-line industries”, others called for opening them to greater private participation. This will be discussed in Section 2.8.

2.7.1 Consolidation

The *Eleventh Five-Year Plan for the Coal Industry* published in 2007 declared industry consolidation (煤炭整合) and the establishment of “orderly development” (有序开发) to be the central priority for the *Plan* period. Consolidation was to be achieved partly by closing or merging small mines among each other, but above all by having large mining enterprises take over small ones.

As we will see in Section 2.8 below, both the *Eleventh Plan* and the 2005 *Opinion* were relatively explicit in calling for these “large enterprises” to be state firms, and this preference was also expressed by officials in other documents. All documents stressed “cultivating” (培育) these large companies. As the *Opinion* put it, this was the “main line” (主线), and within 3 to 5 years (i.e., by 2008 or 2010) several enterprises of 100mt capacity were to be established (State Council 2005a). Two years later, the *Eleventh Plan* noted that two firms (Shenhua and China Coal) had indeed achieved production capacity of 100mt and three of 50mt, and set a goal of lifting a further 4 to 6 firms to 100mt and 5 to 7 firms to 50mt capacity. Together, these 14 to 18 firms were to produce over 50% of national coal output (NDRC 2007).

These enterprises, ran the aspiration consistently expressed in the documents, would be highly efficient, have high coal recovery rates, be low polluting and provide safe working conditions. They would also play key roles in fostering the development and absorption of new mining and coal technologies, and in the coal distribution system, ensuring that supply and demand remained in balance. Not least, they would provide the state with effective levers of control over the coal market and coal resources, guaranteeing the security of energy supplies (Zhang 2008). While both the *Opinion* and the *Eleventh Plan* at least rhetorically called for the creation of large enterprises to proceed mainly via market operations they consistently emphasized the importance of “strengthening government push and policy guidance” (强化政府推动和政策引导) to develop large enterprise. (State Council 2005a, NDRC 2007, Zhang 2008).

The most visionary dimension of the *Opinion* and the *Eleventh Plan* was the call to develop 13 (subsequently expanded to 14) “large-scale coal bases” (大型煤炭基地). Collectively, these bases encompassed around 90% of China’s coal production and most of the main mining regions (NEA 2012).¹⁸ The impetus behind the “bases”-idea was the search to better integrate coal mining, transportation and power production, and spur the development of coal-chemicals and other unconventional coal technologies (Rui et

¹⁸The base areas were Shendong (神东; Western Inner Mongolia and Northern Shaanxi), Shaanbei (陕北; the remaining coal regions of Northern Shaanxi), Hualong/Huating (黄陇／华亭; Central Shaanxi and Gansu); Jinbei (晋北; Northern Shanxi), Jinzhong (晋中; Central Shanxi), Jindong (晋东; Eastern Shanxi), Luxi (鲁西; Western Shandong), Lianghuai (两淮; Anhui), Jizhong (冀中; Hebei and Henan); Henan (河南; Henan), Mengdong (蒙东; Eastern Inner Mongolia, Heilongjiang, Liaoning), Yun-Gui (云贵; Yunnan and Guizhou), Ningdong (宁东; Eastern Ningxia). Xinjiang was subsequently added as a fourteenth base.

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al. 2010). It remains to be seen whether this extremely ambitious vision will ever be realized.¹⁹ Important for our purposes was the insistence that the bases were to be developed exclusively by large-scale state enterprises, with each mining district (矿区) within a base to be developed, “in principle”, by one enterprise only (NDRC 2007). It should be noted that of the 14 proposed bases, 10 lay wholly or partly within our five case-study provinces (cf. Footnote 20).

In reality, of course, many of these mining districts were already being mined by multiple – and often by very many – enterprises; the TVMs. Already in 2005 the National People’s Congress and the State Council had set a goal of “solving the small-mine problem within about three years” (State Council 2007a; cf. State Council 2005a), and the *Eleventh Plan* reiterated this objective and called for “speeding up the elimination of small-scale mines” (NDRC 2007). The *Plan* gave numerical targets to each province for the reduction in the number and output from “small-scale mines” to be achieved by 2010. For instance, Shanxi was to reduce the number of these mines from 3124 to 1100; Shaanxi from 769 to 250 mines (NDRC 2007: p. 31). Nationally, the total number of small-scale mines was to be reduced to 10,000 by 2010 and their output to 700mt or 27% of total production, which was expected to reach 2.6 billion tons in 2010 (*ibid.*).

Three distinct approaches were outlined through which, in combination, this was to be achieved. The first approach was, having large enterprises take over small and medium-sized mines. While not explicitly stated, the documents’ formulations clearly suggest that this was the preferred approach. We can see this from the fact that the documents not only consistently emphasized building up large firms and called for having only large enterprises develop the “coal bases”, but that those sections of the documents which concerned “consolidating and transforming the small and medium-scale mines” always listed “encouraging large-scale coal enterprises to acquire and transform medium and small-scale mines” as the *first* method through which consolidation could be accomplished (State Council 2005a, NDRC 2007).

The second approach listed in both documents was to raise regulatory entry barriers to the industry and close mines that failed to meet standards. Efforts in this direction had already been taken in 2004, when in addition to the 4 licenses hitherto required of mine operators, two further, safety-related licenses were introduced. The *Opinion* called on local governments to “comprehensively utilize coal [industry] development plans, industrial policies, laws and administrative regulations and other methods to strengthen supervision and management (监督管理) over coal-mine development, construction and production”. Local authorities were to “impose standards on the registration and management” of mine exploration and development and “correct and prevent all approvals and grants of mining concessions that had been made without proper authority in the

¹⁹The “bases” are geographical concepts, defined by the lay of individual coal fields. They are not institutional entities, but cut across many powerful institutions. To date, Shenhua is the only entity that comes close to approximating the “bases” vision. For detailed discussion see Rui et al. (2010).

name of ‘attracting business and investment’ (招商引资为).” (State Council 2005a). Small mines that were “structurally irrational (布局不合理), did not meet safety standards, wasted resources and did not meet environmental requirements” as well as mines that were “hard to consolidate” (难以整合) were to be closed (NDRC 2007).

Finally, a third method was to encourage small and medium-sized mines to merge among each other, though the *Opinion* emphasized that this should be restricted to small mines with “credible” reserves (资源储量可靠的). While the documents gave at least rhetorical primacy to market mechanisms for accomplishing consolidation, they were very clear that “legal and obligatory administrative means” (法律和必要的行政手段) could and should be used if markets and “economic means” (经济手段) did not suffice.

2.7.2 Safety

Already the 1983 State Council *Notice* that had served as the main policy stimulant for TVM development observed that poor safety conditions in small mines were a “serious problem” and exhorted leaders at all levels to “treat [mining safety] seriously and give it high-level attention” (State Council 1983). In the 1980s there were occasional campaigns to close unsafe small mines.²⁰ However, while the state began formulating a number of mining safety regulations in the 1990s, until about 2001 the problem received little sustained political attention. Strikingly, even the documents and speeches regarding the 1998–2001 Closure Campaign tended to justify the shutdown of the TVMs mainly in terms of adjusting industry structure and balancing the volume of coal production with market demand – not, in the main, with references to safety.

Several indicators can be used to demonstrate how the central state’s concern with mining safety increased in the 2000s. One is the space given to safety in the Coal-Industry Five Year Plans, which can be measured by the number of appearances of the word “safety” (安全). As we can see in Table 2.2, in the *Tenth Five-Year Plan for the Coal Industry*, the word appeared 27 times in a work-related sense (three times in relation to energy security); but in the *Eleventh*, it appeared 81 times (and in the *Twelfth*, 40 times) in work-safety-related contexts (thrice in regard to energy security). A further indicator is the frequency of articles about mining safety and coal-mine accidents in the *People’s Daily*, which can be treated as a reliable guide to the priorities and “spirit” (精神) of the central government (cf. Footnote 4). As Figures 2.4 and 2.5 show, beginning

²⁰For instance, in 1987 several thousand small mines were closed (at least temporarily) for safety reasons. Tellingly, though, that campaign seems to have been triggered as much by concerns over excess coal production as over safety (Thompson 2003: pp. 142–144).

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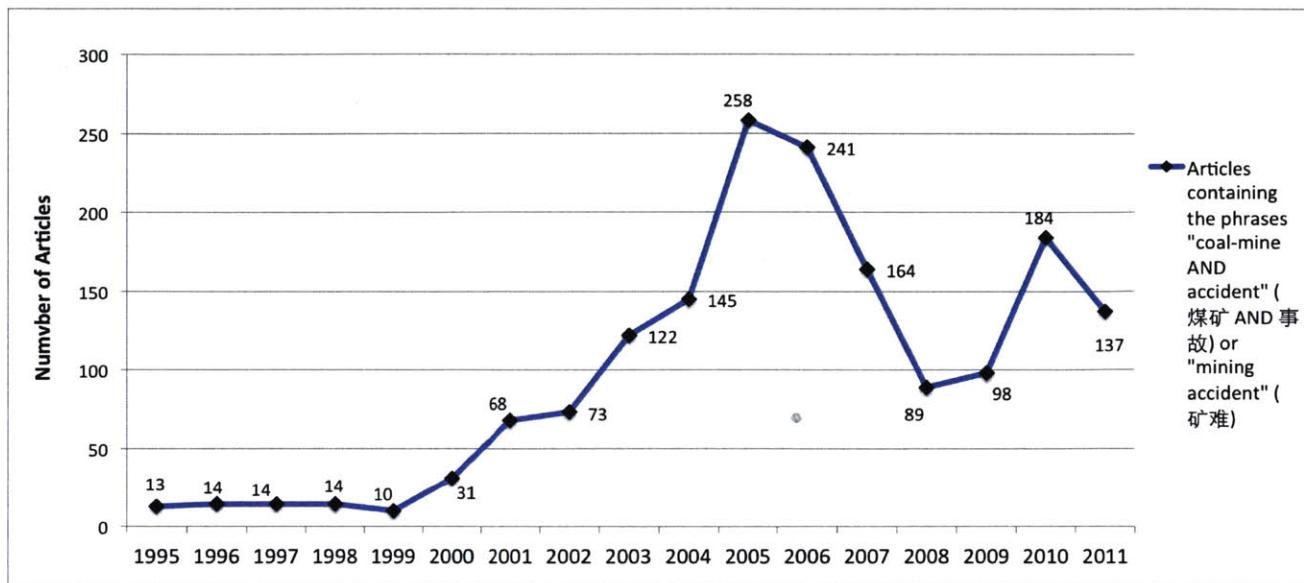


Figure 2.4: References in the *People's Daily* to Coalmine Accidents
Source: People's Daily Image and Text Archive (人民日报图文数据库)

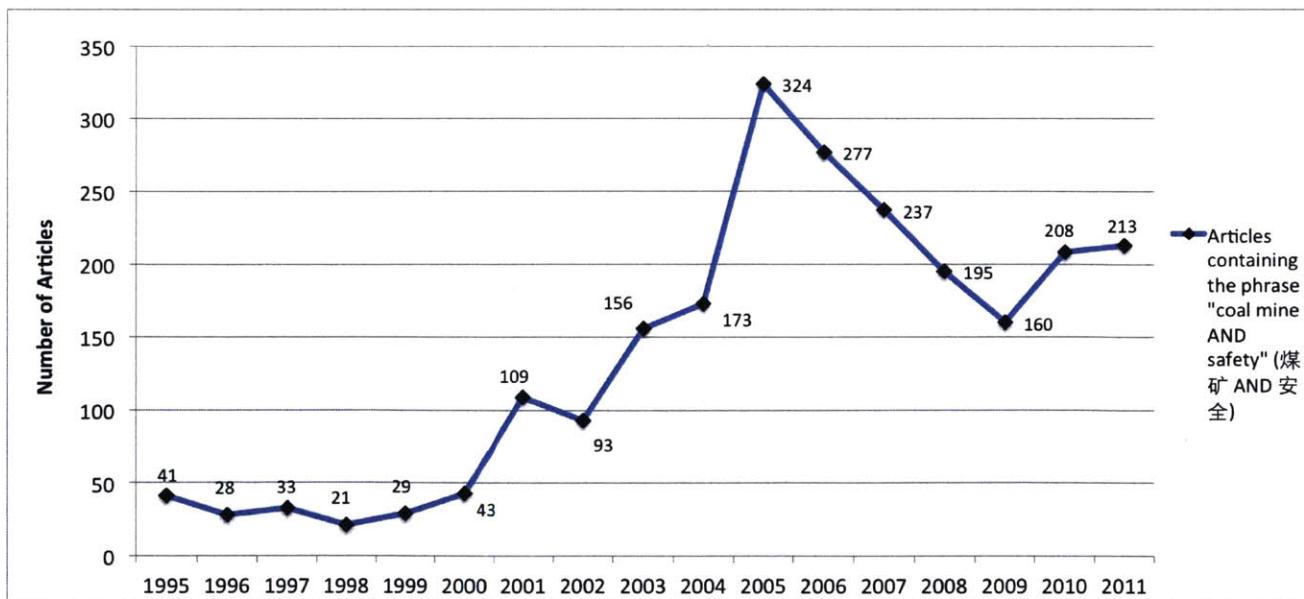


Figure 2.5: References in the *People's Daily* to Coalmine Safety
Source: Source: People's Daily Image and Text Archive (人民日报图文数据库)

in 2000 the number of articles in the *People's Daily* containing the words, respectively, “coal-mine” and “safety” (煤矿 AND (安全), and “coal-mine” and “accident” (煤矿(AND(事故, 煤矿 AND (矿难) rose sharply and abruptly.²¹

Tenth Plan	Eleventh Plan	Twelfth Plan
27	81	40

Table 2.2: Number of References to Mining Safety in Five-Year Plans

Actions of course speak louder than words, and substantial action was taken. In 2000, still under Zhu Rongji, the State Agency for Work Safety (SAWS) was created, and in 2005 it was given ministerial-level rank. Beginning with the 2002 Work Safety Law (安全生产法), an extensive body of regulation regarding mining safety began to be issued and an inspectorate built up to carry out both spot-checks on individual mines and help police the wider implementation of the government's closure, rectification and consolidation policy.²² Finally, top leaders took important symbolic actions. For instance, on the 2005 New Year's Day, Wen Jiabao's visited relatives of miners killed in the November 2004 Tongchuan accident.

2.8 The Debate over State Ownership in the 2000s

Regarding the state-owned economy, the main policy concern during the 1990s had been to stem SOE losses and make the state sector fit for market competition. This

²¹Tim Wright (2012: p. 193, Figure 8.1) also tracks the number of articles mentioning coal-mine safety in the *People's Daily*, yet has significantly lower article count than I do. The explanation seems to lie in the search command Wright uses (we both rely on the online *People's Daily Image and Text Archive* (人民日报图文数据库). Wright appears to search for the phrase “coal-mine safety” (煤矿安全), which only returns articles where the two words appear together, while I search for “coal-mine AND safety” (煤矿 AND 安全), which returns all articles in which both words appear, but without imposing any constraints on word order. Since (almost) all articles that include both words will in some way be making reference to mining safety, but only a fraction of articles that discuss mining safety will include the (somewhat unusual) phrase “煤矿安全” there is no obvious reason for preferring Wright's search command. That said, Wright's results are entirely consistent with mine in as far as they show a drastic increase in the frequency of the phrase after 2000, from a low prior baseline.

²²For detailed discussion of China's mining safety crisis and creation of the work-safety regulatory system see China Labour Bulletin (2008), Feickert (2007), Wang (2006) and Wright (2012: pp. 158–198).

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involved large-scale lay-offs, bankruptcies and privatizations of small and medium-sized firms, and the corporatization of large SOEs. At the time many observers interpreted this as heralding comprehensive privatization, but it is now increasingly recognized that this was never the intention of the dominant groups within the state. In the 2000s the state-owned share of the economy stabilized (Naughton 2006a, 2011). However, that only rendered the question of what to do with the large state firms and whether they were an asset – facilitating economic governance, industrial development and securing CCP rule and “socialism” – or a liability distorting factor flows, resource allocation and, due to their lobbying power, economic policy itself, more divisive. The very large profits – running to hundreds of billions of RMB a year – that the state sector had begun earning by the mid-2000s and largely retained to spend as it saw fit²³ (Naughton 2006, 2012) added further fuel to these controversies.

This debate took place both within the state and in the public sphere. Given the contentious nature of the issues, the debate within the state was rarely carried out openly but has to be reconstructed through careful reading. Thus, the 2000s saw a number of subtly contradictory – albeit authoritative – state policy documents released and top leaders and senior officials made a number of interventions through informal pronouncements, interviews and essays that were again both authoritative, and only semi-official.

While no consensus and no official policy emerged, this section argues that the advocates of nationalization tended to have the upper hand in these debates and seem to have constituted the dominant faction at the Center. Certainly, the number of documents and pronouncements advocating nationalization of coal mining outnumbered those seeking explicit to safeguard a space for private ownership of mines. Moreover, because all sides in this debate believed that consolidating the industry in larger units was key to resolving its problems and because the small-scale sector to a significant extent was the private sector, even those officials skeptical of nationalization as an objective in its own right tended to advocate or support policies that *de facto* discriminated against the private sector.

Arguably the most important consequence of these dueling documents and pronouncements was to maximize the provinces' space for policy choice, since both nationalization and preserving the private sector could be justified as consistent with *some* authoritative central-government document and/or leader's statement.

²³In the early 1990s, the centrally-owned enterprises (the most important and profitable part of the state sector) were exempted from having to remit their – then paltry – profits to the central government. They could retain them within the enterprise. The huge profits some of these firms began earning after 2000 reopened the issue. From 2007 on they were gradually forced remit some of their earnings, but up to the time of writing this has remained a small share (10–15% of profits), and even this seems to largely retained by the State Assets Commission (SASAC), rather than used for e.g. the Social Security Fund, as reformers had wanted.

2.8.1 The Public Debates

The late 1990s and early to mid-2000s saw a general intellectual backlash in China against market reforms (Fewsmith 2008), and in summer 2004 these debates became focused on the question of SOE privatization. The specific occasion was a talk by the Hong Kong economist Larry Xianping Lang, who accused the managers of Kelon, a recently-privatized SOE, of having manipulated the privatization (management buy-out, MBO) process to pocket large sums of money. This set off a furious public debate about SOE privatizations in general and MBOs in particular. In December 2004 the State Council forbade MBOs categorically for China's large SOEs and imposed stricter regulation on them for small and medium-sized companies. In 2005 the management of Kelon was arrested (Fewsmith 2008: pp. 258–267).

For the argument advanced in this chapter and the dissertation overall the “Larry Lang debate” is of relevance only in so far as it gives a sense of the underlying intellectual climate in mid-2000s China, and underscores the potential of public debates – under certain circumstances – to drive policy.²⁴ More important for the story told here will be the so-called *Guo Jin, Min Tui* debate touched off by Shanxi’s coal nationalization, which was even more acrimonious than the Larry Lang fracas. Unlike the latter, it seems to have ended in a draw more than a clear victory for either side (coal nationalization ultimately went ahead, at least in Shanxi and Henan), but as we will see in Chapter 5 the outcry over the perceived “Advance of the State and Retreat of the Private Sector” (*guo jin, min tui*; 国进民退) wrong-footed the Shanxi government, forced those groups in the central state advocating for coal-industry nationalization to intervene in support of Shanxi, and may have come close to derailing that program. While information is sketchy, the “Guo Jin Min Tui” outcry seems also to have been used by those groups in the state who were skeptical of nationalization, and may have been a factor contributing to other provinces’ decision to refrain from nationalization and opt for forms of industry consolidation that afforded greater protection to private interests.

2.8.2 The Debate within the State: Contending Bureaucracies and Individuals

While the public debates consisted of relatively straightforward confrontations between new-left and liberal intellectuals and media outlets, the debate within the party-state was, by nature, more submerged, making it harder to say with certainty which bureaucracies and individual leaders lined up behind which positions. However, the available documents and pronouncements do provide a basic sense. I will first lay out which institutions and leaders seem to have aligned on what side in these debates, and then

²⁴It appears that the December 2004 restrictions on MBOs were a direct response to the debate and would not have come about at that time or in that form without it. Interview 65 (Chinese academic).

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examine the documents and pronouncements in which these competing lines were laid down.

The State-owned Assets Commission (SASAC)²⁵ was foremost among those advocating a substantial and expanded role for state enterprises. SASAC's role alerts us to the complicated mix of beliefs and bureaucratic and economic interests in this debate. There is no reason to doubt the sincerity of the SASAC leadership's expressed belief in the benefits of a strong state sector for national economic governance. But clearly SASAC's political power and access to resources also hinged on preserving a substantial state sector (Naughton 2006, 2007, 2012).

The bureaucracies directly responsible for coal-industry policy – the NDRC's energy departments, the National Energy Administration (a separate body, albeit usually led by top NDRC officials), and the State Agency for Work Safety (SAWS) – also appear to have all supported nationalizing the coal industry or at least substantially increasing the state sector's share of it. Other influential institutions such as the Ministry for Industry and Information Technology (MIIT), the China Development Bank (CDB), and the Ministry of Finance (MOF), too, seem to have favored preserving a large role for state ownership, though here the evidence becomes less clear and they also had no direct involvement with coal policy.²⁶ More broadly, interviewees stated that the dominant view within the central government was that state ownership of key industries and firms – and of the energy industries in particular – was of considerable advantage for managing the economy during China's developmental stage (Interviews 44, 48, 61).²⁷ The state sector of course also provided very attractive opportunities for private profiteering by connected officials and their friends (Naughton 2012).

Establishing what the views of the top leadership (Politburo and Standing Committee) were and how – if at all – the debates and divisions over state ownership map onto

²⁵The State-owned Assets Supervision and Administration Commission, to give it its full name, is a ministry-level body established in 2003 to exercise ownership rights and certain regulatory responsibilities over SOEs on behalf of the state. Central SASAC is responsible for the SOEs owned by the central government; provincial and local SASACs hold local and provincial SOEs.

²⁶The first head of MIIT (which was created in 2008) was Li Yizhong, who had previously served as the head of SAWS and as a top official in SASAC and head of Sinopec (the state oil refiner). As we will see below, Li is on record as having advocated for the expansion of state ownership in coal mining. A former official of one of MIIT's predecessor institutions also told me during field work that MIIT was a strong advocate of state ownership and Japanese-style industrial policy (Conversation, Beijing 2012). Chen Yuan (陈元), the son of revolutionary elder Chen Yun (陈云) and until 2013 head of the CDB, is a noted advocate of a large role for the state sector and strong state control of economy and society in general (cf. Fewsmit 2008; Wu 2013). An official from the Ministry of Science and Technology told me that aside from SASAC and the NDRC, MOF was one of the strongest proponents of preserving or even strengthening the state sector because it had over the years poured so much money into them. That gave MOF significant influence over the companies, enabling its officials to acquire private benefits from the firms (e.g. highly paid jobs) (Interview 44).

²⁷Division-level (处级) official from Ministry of Science and Technology who was closely involved with a large-scale coal energy investment project (44); deputy department-level (副厅级) manager from a major SOE (48); deputy-minister level (副部级) official from the tax bureaucracy (61).

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other rumored factional divisions within the Party (“Youth League”, “Shanghai Gang”, etc.) is more difficult. Wu Bangguo, an ally of Jiang Zemin and until 2012 the second-highest leader after Hu Jintao, was closely involved in the late-1990s push to close the TVMs and consolidate coal mining under large SOEs, and was deeply involved in the larger SOE-focused national champions strategy. While I know of no further coal-related pronouncements from Wu after 2002 (when the economic and industrial policy portfolios were transferred to Wen Jiabao), there is also no reason to believe that he changed his mind. In Chapter 5 we will see that Xi Jinping gave strong support to the Shanxi authorities at a crucial point in 2009, when they seem to have been wavering over whether or not to carry out nationalization. Furthermore, in 2009 Xi gave an important speech in which he told listeners that “the state-owned enterprises are an important pillar of socialism with Chinese characteristics, and an important basis of our party’s rule” (国有企业是中国特色社会主义的重要支柱，是我们党执政的重要基础) (Xi 2009).²⁸ Xi reiterated this point at a November 2015 Politburo Study Session (CCTV 2015). When nationalization ran into serious obstacles and resistance in Fall and Winter 2009, five Standing Committee members wrote a memo in support of Shanxi’s undertaking. Again, this appears to have been crucial for enabling nationalization to continue and be completed.

The fact that only five of the nine Standing Committee members appear to have signed the support memo hints at divisions within the top leadership over coal nationalization, and the broader question of the role of the state sector. There is further evidence in this regard. One is that the State Council ended up issuing multiple, subtly contradictory but equally authoritative documents on the issue. Wen Jiabao and Li Keqiang (a close ally of Wen and Hu), in particular, seem to have been at least skeptical if not outright opposed to the agenda of securing permanent state control over key industries, including coal. In the summer of 2009 (when nationalization was in full swing) Wen conducted an inspection tour of Shanxi, but – at least in his published remarks – pointedly failed to endorse or otherwise comment on Shanxi’s actions. Li Keqiang reportedly played an important role in arranging for the World Bank and the State Council Development Research Center (the State Council’s policy research body) to produce a 468 page report, *China 2030*, which was widely seen as an effort to set the policy agenda for the Xi-Li administration (*Economist* 2012b, Naughton 2013). The report contained some very pointed language about the need for further reform of the state sector and questioned the rationale for state ownership of many industries, including coal.

Yet Wen as well as leading officials at the Development Research Center simultaneously espoused a highly interventionist style of economic governance (Heilmann and Shih 2012, Naughton 2011a). During his ten years in power, Wen pushed through major industrial-policy initiatives to foster “indigenous innovation” and improve work safety, ecological outcomes and industrial structure by forcing “backward” plant to close or upgrade. In coal, this expressed itself in the steady drum-beat of calls for closing small

²⁸I am indebted to Naughton (2013) for alerting me to this speech.

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mines, consolidating them under large firms or at least merging and upgrading them that we discussed above. This matters, because while Wen appears to have been more open to permanent private-sector participation and skeptical of renationalization as an end in itself, the interventionism he espoused also, we shall see, tended to undercut efforts to defend private participation.

Since efforts to relate provincial policy choices to Communist Party factional politics enjoy a certain recurrent popularity (e.g. Shih 2009), it is important to note that the apparent divisions between top leaders who, supposedly, belong to different factions do not map onto the provincial policy choices observed in coal mining at all. Factional analyses of CCP politics commonly argue that the main lines of division in the 2000s were between Jiang Zemin's Shanghai faction (to which Wu Bangguo belonged) and Hu Jintao's Youth League faction. While never a member of the Communist Youth League himself, Wen Jiabao is commonly seen as closely allied to Hu (e.g. Wikileaks 2009a, 2009b; Naughton 2004). Factional analyses used to argue that Xi Jinping also belonged to Jiang's faction (or at least drew support from Jiang), but – partly in light of Xi's destruction of several important protégés of Jiang – now seek to delineate Xi's own, independent bases of support in the Party (the significance of this will become clear in a moment) (see e.g. Cheng Li's writings).

The point here is not to assess the validity of these factional models of Chinese politics. Rather, the point is that they provide little explanatory power for our puzzle. To the extent that these models are at all accurate, Shanxi was a "Youth League" province.²⁹ Yet Li Keqiang and Wen Jiabao's apparent skepticism did not stop the province pursuing nationalization. Similarly, the leadership of Shaanxi province was closely linked to *both* Hu's Youth League faction and to Xi Jinping.³⁰ Yet despite the link to Xi, who seems to have urged nationalization in Shanxi, we will see that Shaanxi preserved and protected private coal mines. Henan, which does not seem to have been linked to any particular faction, nationalized its coal mines, but Inner Mongolia – again a Youth League province³¹ – did not.

²⁹ Shanxi's party secretaries from 2005 to 2014 were Zhang Baoshun (张宝顺) and Yuan Chunqing (袁纯清), both of whom made their career in the Communist Youth League, which is considered the core base of Hu Jintao's faction. The Shanxi governor in 2007–2008, Meng Xuenong (孟学农), under whom the nationalization plans were developed, also was a Youth League cadre. Hu Jintao's key aide and Chief of Staff, Ling Jihua (令计划) – also for long years a cadre in the Youth League – is a Shanxi native, and in the 2000s several of his close relatives and friends were senior Shanxi politicians. The validity of this interpretation (that Shanxi was a Youth League province) was also emphasized to me by a Chinese academic (Interview 65).

³⁰ The Shaanxi governor from 2006 to 2010 was Yuan Chunqing (cf. Footnote 38), who spent most of his early career in the Communist Youth League. His replacement as governor (2010 to 2012) and current Shaanxi party secretary (since 2012), Zhao Zhengyong (赵正永), too, is a former Youth League leader. Zhao Leji (赵乐际) who served as Shaanxi Party Secretary from 2007 to 2012 is reportedly a close confidante of Xi Jinping. The Xi family has very deep connections to Shaanxi (Li 2014).

³¹ Hu Chunhua (胡春华), Inner Mongolia's party secretary from 2009 to 2012, was a former Youth League cadre considered very close to Hu Jintao (cf. *Economist* 2012a). The IMAR governors since 2003 Yang Jing (杨晶) and Bagatur (巴特尔), too, are former Youth League leaders.

2.8.3 Conflicting Documents and Leaders' Pronouncements I: Advocacy of Nationalization

The most systematic attempt at defining the extent to which state ownership was to be preserved was undertaken in December 2006, when the State Council issued an *Opinion* on “Promoting the Adjustment of State Capital and the Reorganization of State-owned Enterprises” (State Council 2006a). This document was originally drawn up by SASAC. It stated that “state capital should concentrate in industries and key fields that affect national security and the lifelines of the national economy” (推进国有资本向关系国家安全和国民经济命脉的重要行业和关键领域…集中), while withdrawing from non-strategic industries. In the former industries, the state-owned economy’s “controlling power” was to be “strengthened” and its “guiding” – or “dominating” – function was to be “fully brought into play” (增强国有经济控制力，发挥主导作用).

Yet the document did not specify *which* industries these “important industries and fields” actually were. They were said to “mainly include” “industries touching national security, important infrastructure and important mineral resources, industries providing important public goods and services, as well as important backbone enterprises (重要骨干企业) in pillar industries and high-tech industries.” “Relevant departments” were to “urgently research, define and publish lists of relevant industries and enterprises” (State Council 2006a).

In the event, no official list was ever made public, but two weeks after the release of the *Opinion*, the head of SASAC, Li Rongrong (李荣融), gave an interview to Xinhua and stated that seven industries fell into this “lifeline” category; viz. defense, electricity production and distribution, oil, telecommunications, aviation, shipping – and coal. In these industries, the “state-owned economy [was] to retain absolute control.” (保持绝对控制力) (Xinhua 2006a).

That no official list was ever published and Li was obliged to communicate his list via a Xinhua interview very likely reflects an absence of agreement among different bureaucracies and leaders over the issue. This interpretation is supported by the fact that the *People's Daily* – which is politically more authoritative than Xinhua – carried the same interview with Li but edited it in ways designed to give it a very different message. The *People's Daily* version did not list any specific industries as earmarked for state control, and it had a very different title: While the Xinhua copy was entitled “China explicitly reserves seven major industries for absolute state control”, the *People's Daily* article was entitled “Central-owned enterprises will be reduced to 100 or less” (*PD*

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2006a).³² The emphasis was thus placed on the idea that the state sector was to be further pruned and restructured.³³

Muddying the waters further was a previous State Council *Opinion*, released in early 2005, on “Encouraging, Supporting and Guiding the Development of the Individual, Private and Other Non-Publicly-Owned Economy”, colloquially known as the “36 Articles” (36条). This document had called for “permitting non-state capital to enter monopoly industries” (允许非公有资本进入垄断行业和领域), like “electric power, telecommunications, railroads, civil aviation, and oil”. The term “monopoly industries” (垄断行业) is used somewhat loosely in contemporary Chinese debate to refer to industries dominated by large SOEs.³⁴ Among these “monopoly industries” private capital was to be limited to non-controlling equity participation (参股) in those that were “natural monopolies” (自然垄断业务), but in the others it was to be unrestricted. (The “36 Articles” did not explain which industries were natural monopolies or how natural monopolies could be recognized.)

Specifically with regard to the mining of mineral resources – i.e., also coal – the “36 Articles” mandated that “qualified” non-state enterprises (具备资质的) were to receive equal treatment with SOEs in the allocation of exploration and mining rights, and called for “encouraging” (鼓励) non-state capital to engage in “the exploration and development of commercial mineral resources” (State Council 2005b). In other words, with regard to coal Li Rongrong’s pronouncements and the 2006 State Council *Opinion* – which had mentioned “important mineral resources” as one of the lifeline industries – directly contradicted the “36 Articles”. But neither addressed this contradiction, let alone resolved it (e.g. by repealing or amending the “36 Articles”).

In fact, the 2006 State Council *Opinion* was not the first document to subtly contradict the “36 Articles”. Five months after the “36 Articles” were published, the State Council issued the *Opinion on Promoting the Healthy Development of the Coal Industry* (State Council 2005a). This document explicitly called on SOEs to play an important role in coal mining. Construction of the “coal bases” – covering, it be remembered, about 90% of the industry – was to “rely on the large-scale state-owned coal enterprises” (以国有大型煤炭企业为依托, 加快...等13个大型煤炭基地建设). Coal resources situated in mining areas that were under central-state planning or contained coals “of high value

³²The *People's Daily* interview – unlike Xinhua – also refrained from mention Li by name or identifying his rank, choosing instead to describe the interviewed individual only as “a relevant responsible person from SASAC” (国资委有关负责人) (*PD* 2006a).

³³This idea had also been contained in the original State Council *Opinion*, which had noted that state enterprises still sprawled into too many non-strategic industries, and had called for further mergers *within* the state sector. What is significant is that the *People's Daily* chose – or more likely was instructed to – emphasize this aspect of the document, while Xinhua played up the idea of expanding state control in “lifeline” industries.

³⁴Strictly speaking, none of these industries are monopolies in China, except for the railroads. They are SOE oligopolies.

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for the national economy” were to be “controlled by state capital” (国家规划矿区、对国民经济具有重要价值矿区的资源开发由国有资本控股) (State Council 2005a).

The 2007 *Eleventh Five-Year Plan for the Coal Industry* also indicated a clear preference for state ownership of the industry. As we saw above, the *Plan* defined coal mining as “a basic lifeline industry for the national economy and national energy security” – in other words, one of the industries that the State Council’s 2006 *Opinion* had said were to be controlled by state capital. The *Plan* furthermore called for “constructing several large-scale coal enterprises controlled by state capital responsible for trans-provincial coal supply, and raising the state’s control over coal resources and its ability to regulate and control the coal market” (形成若干个由国有资本控股、担负跨省区市煤炭供应的大型煤炭企业集团，提高国家对煤炭资源的控制力和对煤炭市场的调控力) (NDRC 2007). The only reference to private investment in the entire *Plan* was a part-sentence calling for promoting “all types of capital to participate in mixed-ownership enterprise groups (发展各类资本参与的混合所有制企业集团). Since SOEs with private minority shareholders are often referred to as “mixed ownership enterprises” and this phrase appeared in the same section of the *Plan* that espoused a need for “large-scale coal enterprises controlled by state capital” and for “raising the state’s control over coal resources”, it would be perverse to interpret it as encouraging controlling private ownership of coal mines.

According to a scholar with close ties to Shanxi political circles, in February 2008 central leaders also informally called on Shanxi to strengthen state control over the coal industry.³⁵ However, the scholar emphasized, this was a case of the Center communicating a certain “spirit” (精神), or general strategic guidance, to the province, not an order to undertake specific policy actions (Interview 83).

Senior officials from the NDRC, National Energy Administration (NEA) and SAWS also published newspaper commentaries or gave interview statements supporting nationalization of the coal industry. In spring 2008 Li Yizhong (李毅中), the head of SAWS, argued in a speech that

to guarantee the primary energy supply and to resolve the coal industry’s problems, we must rely on the large *state-owned* mines and speed up construction of large-scale coal enterprise groups and safe, high-efficiency modernized pits. (Li 2008, my emphasis).

When the first experiments with nationalization were begun in the Shanxi municipality of Linfen (临汾), a SAWS official – apparently speaking for the agency – expressed “complete support” for Linfen’s “reform measures” (充分肯定了临汾的改革措施) (*China*

³⁵The scholar claimed that he had been told of the transmission of this “spirit” by a senior member of the Shanxi government.

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Economic Weekly 2008), and the SAWS journal *China Coal Industry* praised Linfen for nationalizing the industry (see *China Coal Industry* 2008). It appears that a consensus existed within SAWS that only state ownership could guarantee workers' safety.³⁶ Later in 2008, Zhang Guobao (张国宝), the head of the National Energy Administration and Deputy Director of the NDRC, published an op-ed in the *People's Daily* that called for using the Financial Crisis to build up large-scale enterprises to "raise the state's control and influence over the energy [industries]" (提高国家对能源的控制力和影响力) (Zhang 2008).

When Shanxi's efforts to nationalize the province's coal mines ran into strong resistance and sparked a public uproar (see Chapter 5), senior NDRC and NEA officials as well as Standing Committee members came out in support of the province. In Fall 2009, an NDRC study team was sent to Shanxi to investigate the nationalization, and duly gave a very positive appraisal to the province's actions. On the basis of this investigation, the above-mentioned five Standing Committee members then composed a memo "fully approving" (充分肯定) of Shanxi's actions (Shang 2010; for further discussion see Chapter 5).

While that memo was never made public, senior NDRC and NEA officials publicly reiterated their support for Shanxi and coal nationalization. In January 2010 Zhang Guobao wrote a further *People's Daily* op-ed in support of Shanxi's coal nationalization (Zhang 2010), and at a joint press conference of the Shanxi government, the NDRC, and the NEA deputy director Wu Yin (吴吟) declared that the coal-industry consolidation Shanxi had implemented was "appropriate to the industry's development trend" (符合煤炭工业的发展方向) and should be "spread to the entire country" (要向全国推广) (*Caijing* 2010a, 2010b). Later in January, the head of the NDRC, Zhang Ping (张平) visited Shanxi and declared that its industry restructuring had been "extremely necessary" (非常必要) (*Caijing* 2010b). Echoing the language of Zhang Guobao's 2008 op-ed, an NDRC Powerpoint presentation from 2010 also restated the importance of "increasing the state's control over coal resources and its power to coordinate the coal market" (提高国家对煤炭资源的控制力和对煤炭市场的调控力), and pointed to large state-owned corporations as the tools for doing so (NDRC 2010). Speaking to the media in October 2010, Wu Yin restated the NEA's support for what had become known as the Shanxi and Henan "models" of coal-industry restructuring (nationalization and

³⁶A Western mining safety consultant with long experience in China told me that at a Fall 2008 conference on mining safety organized by the International Labor Organization, a SAWS representative argued strongly for nationalization as a strategy for improving mining safety. According to the interviewee, the SAWS representative justified this with reference to the better safety performance of China's SOEs compared to China's private companies as well as the improvements in mining safety (apparently) seen in Britain after nationalization in the 1940s. The consultant interpreted this as implying that a consensus had formed over the issue in SAWS. (Interview 21). In Fall 2006, officers from the US embassy in Beijing attended a Sino-American conference on mining safety, and were struck by the deep-seated suspicion of the private sector harbored by most of the Chinese participants (officials from SAWS, the Ministry of Labor and Social Security and the All-China Federation of Trade Unions, as well as academics) (Wikileaks 2006).

consolidation of the industry under large SOEs), noting that both provinces had greatly improved mining safety, sustainability and concentration levels while guaranteeing coal supply (*China Business News* 2010).

2.8.4 Conflicting Documents and Leaders' Pronouncements II: Submerged Criticism of Nationalization

But the controversy triggered by Shanxi's actions prompted not only the supporters of coal-industry nationalization to express their views. Skeptics rallied, too, and were able to get further State Council *Opinions* issued in 2010 as well as the subsequent *Twelfth Five-Year Plan* written in ways that could at least be interpreted as providing legitimization and central endorsement of continued private participation in the coal industry. I discuss these below.

It is unclear what role the media polemics over the “Advance of the State and Retreat of the Private Sector” (*Guo Jin Min Tui*) played in this. There is evidence that in 2009 this acrimonious and unexpected debate wrong-footed the Shanxi authorities and may have come close to derailing nationalization (Chapter 5). In their coverage of these new State Council *Opinions* from 2010 and subsequent coal-policy documents several newspaper articles hinted that the “great societal controversy” (社会巨大的争议) over *Guo Jin Min Tui* was one issue raised by skeptics (21 CBH 2010a, *China Business News* 2010, EO 2012a). Unfortunately (but, given the inherent sensitivity surrounding central-state policy and divisions within the Center, perhaps unsurprisingly), these articles provide scant details on this issue. Common sense, however, tells us that given the Chinese state’s sensitivity to public anger and media outcries (cf. Chapter 3) it would be surprising if the outcry had not raised concerns and critics not seized on it to press for a more private sector-friendly policy.

Wen Jiabao inspected Shanxi in 2009 while the controversy was raging, but although he visited Datong Coal Mine Group and called for continued structural adjustment and elimination of backward capacity in the steel (!) industry, he refrained from any public comment about the nationalization sweeping the coal industry. While we cannot be certain about the meaning of this silence – the other interventions by Standing Committee members were also not published in the media – the omission does appear pointed, especially in light of the coal-related documents issued by the State Council in 2010.

In May 2010 – five months after the January NEA and NDRC pronouncements, and in the very weeks when Henan was implementing its own coal-mine nationalization drive – the State Council released an *Opinion on Encouraging and Guiding the Healthy Development of Private Investment*, commonly dubbed the “New 36 Articles” (State

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Council 2010a). This document sought to restate the rights of private capital to enter various “monopoly” industries that had first been proclaimed in the original “36 Articles”, and more broadly sought to signal continued central support for the private sector (Naughton 2011b).

Most important for our purposes is that the “New 36 Articles” called for “supporting the comprehensive opening of the market for mining rights to private capital” (坚持矿业权市场全面向民间资本开放) (State Council 2010a). Yet while this phrase appears, at first sight, like a strong endorsement of private ownership, in fact it contains subtle ambiguities. Chinese legal and political documents and practice usually distinguish carefully between controlling and non-controlling forms of private equity participation in companies and industries (控股、参股、独资). Indeed, all other paragraphs of the “New 36 Articles” that concerned “basic industries” (基础产业) – which mining for minerals was classified as – specified whether private controlling or just non-controlling investment was permitted. The phrase chosen for mineral mining – “comprehensively opening the market for mining rights to private capital” – did not specify this (and appears nowhere else in the document), and could be taken to imply either. While we cannot be certain, it is likely that the choice of this phrase reflected an inability to reach consensus within the state about the extent to which private firms were to be allowed to control mining operations. Thus, probably, an ambiguous phrase was chosen that either side could interpret as desired.

The next important document issued was the October 2010 State Council *Opinion on Speeding Up and Pushing Forward Consolidation and Restructuring among Coal-Mining Enterprises* (State Council 2010b). This document diagnosed the same ills in the industry as the *Tenth and Eleventh Five-Year Plans*, the 2005 *Opinion on Promoting Healthy Development*, and the various leaders’ speeches chronicled above had – frequent accidents, low levels of concentration, backward equipment, low coal recovery rates, serious pollution, and “chaotic” development – and spelt out the same remedy: consolidating the industry under large firms. So far so conventional, but the document also included several pointed formulations that implied a criticism of Shanxi (and Henan’s) nationalization. Thus, it called for using market mechanisms where possible to bring about consolidation and avoiding “unnecessary administrative interference” (尽量减少不必要的行政干预). Furthermore, the *Opinion* stated that both state *and private* companies were to be permitted to act as consolidators (兼并重组主体; i.e., acquire other mines/companies), provided they “met conditions” (符合条件). Moreover, during consolidation, the “lawful interests” (合法权益) of employees and investors were to be protected (State Council 2010b). Of course, nationalization in Shanxi and Henan *had* relied on administrative compulsion to achieve consolidation/nationalization, investors *had* been forced to sell at below-market prices, and only a handful of independent private firms had survived (Chapter 5).

But the qualifications running through the State Council *Opinion’s* formulations in effect also let both provinces off the hook. As we will see, Shanxi and Henan would have

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had cause to deny all of the (implied) charges: in both provinces, private mine that “met conditions” *had* been permitted to participate in the consolidations. (However, the conditions [primarily minimum-scale requirements] were set so as to exclude all but the very largest private firms – but then the Center itself had been constantly insisting on consolidating the industry under large firms.) Similarly, both provinces paid full lip-service to the idea that consolidation was ideally to proceed via market mechanisms. As the guiding document issued by Henan in 2010 for coal-industry “mergers and restructuring” (the phrase Shanxi and Henan used to refer to their *de facto* nationalizations) put it, “restructuring” was to proceed according to the principle of “the government provides guidance, enterprises act of their own volition, and [all proceeds according to] market operations” (政府引导、企业自愿、市场运作) (Henan 2010; cf. Shanxi 2008a). In other words, the provinces would presumably have argued that the level of administrative compulsion they had ultimately brought to bear was anything but “unnecessary” – without it, there would have been no consolidation (factually, this was almost certainly true). Finally, in both provinces mine owners were compensated according to the same schedule used when the province had first sold the mining rights for the mine or concession in question. If the current owners had not obtained the mine from the government but had bought it at (what the government considered) “irrational” mark-ups on the secondary market, then – as provincial officials indeed argued – that was not the government’s problem but probably an instance of “illegal re-leasing [of mines]” (非法转包).

The point is not only that the subtle qualifications introduced even into the *Opinion's* critical phrases in effect let Shanxi and Henan off the hook, but that they meant that a wide range of policies – embracing both *de facto* nationalization and continued private participation – could be justified in terms of the *Opinion*. The drafters of the *Opinion* will have been fully aware of this. Indeed, several stronger formulations, that would have provided greater protection to the private sector seem to have been considered during the drafting of the *Opinion*, but were ultimately dropped: In late August 2010 the basic content of *Opinion* as well as initial suggestions for the *Twelfth Five-Year Coal Industry Plan* were discussed at a State Council meeting. An individual “familiar with the contents of the meeting” (作为熟知此次会议内容的人士) told reporters that as part of the drive to implement the “New 36 Articles”, the documents being drafted by the State Council (the *Twelfth Plan*, and presumably the October *Opinion*) would include explicit stipulations that private coal companies were to enjoy “equal treatment” with state firms and that small coal companies that were obliged to consolidate would be able to merge and “form alliances” among themselves (属于被兼并对象的小型煤矿企业也可以联合壮大), instead of having to let themselves be taken over by large enterprises (21 CBH 2010a). (As we will see in Chapters 4 and 5, mergers *among* small mining firms – what I call “local consolidation” – were precisely the strategy adopted by local governments in *all* case-study provinces in the years 2004 to 2007 in order to simultaneously fulfill central requirements for consolidation and preserve the local private sector. They are also what local governments argued unsuccessfully for in

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Shanxi and Henan in 2008–2010 [when the nationalizations took place], and what the *other* case-study provinces would do in the years 2010–2012.)

Yet neither the October 2010 State Council *Opinion* nor the subsequent Twelfth Plan included either stipulation: there was no direct demand for equal treatment between private and state enterprises – only the weaker formulation that “qualified” firms of either ownership type could acquire small mines – and in particular, no explicit endorsement of mergers *between* small mines. Instead, to the extent that precise corporate structures were specified, the focus was relentlessly on having firms that *already were large* act as consolidators. While this did not stop Shaanxi and Guizhou, in particular, from predominantly implementing mergers *between* small mines (cf. Chapter 5), it meant that the documents gave much less cover to what was in practice the most important strategy for preserving the private sector than they could have.

That these formulations were being leaked to journalists (cf. *21 CBH* 2010a) shows that officials were fully aware of the significance of these linguistic choices. Indeed, these struggles continued during the drafting of the *Twelfth Plan*, which was released in March 2012. In 2011, an official from the China National Coal Industry Association (中国煤炭工业协会; an industry association representing the coal SOEs) involved in the drafting of the Twelfth Plan told journalists that further raising the industry share of the state firms would form an important component of the Plan’s contents (*21 CBH* 2011), and in March 2012 – after the publication of the *Twelfth Plan* – the NEA’s Wu Yin reiterated his support for the Shanxi and Henan models (*EO* 2012a). Conversely *China 2030* report of the World Bank and the State Council Development Research Center argued that increasing competition and private participation in many of the so-called “lifeline” industries could produce substantial growth dividends, and that private participation in coal mining, in particular, was common in most developed countries (World Bank et al. 2012: pp. 26, 105–107).

The *Twelfth Plan for the Coal Industry* did not resolve these contradictory positions. Instead, it simply compiled them into a single document, but without attempting to mediate between them. In a clear nod to those advocating strengthening state ownership, the *Plan*’s preamble again affirmed coal’s status as “an important basic industry affecting the national economy’s lifelines and energy security” (煤炭工业是关系国家经济命脉和能源安全的重要基础产业). As noted previously, this closely echoed the language of the 2006 State Council *Opinion* that had both called for absolute state control of industries that “affected the national economy’s lifelines”. The *Plan* also provided several further not-so-subtle signals of support for Shanxi and Henan’s nationalizations. Both provinces were commended for the “great progress” they had achieved in eliminating small mines. Other provinces were instructed to “draw lessons” from Shanxi and Henan’s experience of promoting coal-industry consolidation (借鉴山西、河南等地煤矿企业兼并重组、资源整合经验) and establish mechanisms for small mines to withdraw from the industry and eliminate backward production capacity. The *Plan* made the further promotion of consolidation and the creation of large-scale coal corporations

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and large-scale coal bases the center point of its “guiding thought” (指导思想) and of its “key tasks” (重点任务; the section setting out the strategic objectives for the *Plan* period). Shaanxi Province, in particular, was exhorted to make the “large-scale” coal companies the primary actors in consolidation (陕西等重点产煤省要以大型煤炭企业为主体, 进一步提高产业集中度, 促进煤炭资源连片开发) – i.e., *not* to focus on having small mines merge among each other.

However, the *Plan* also included several passages that provided support for participation by private enterprises in coal mining. Thus, the section on promoting consolidation stipulated that consolidation processes were to “respect the laws of the market” and that “enterprises of all ownership types (各类所有制煤矿企) as well as electricity, smelting, and chemicals companies” were to be “encouraged” to participate in mergers and restructuring. A later section of the *Plan* called for “actively promoting the pluralization of investors (积极推进投资主体多元化) [in the coal industry], encouraging the non-state-owned economy to participate in coal production and development, and guiding non-state-owned coal companies (非公有制煤炭企) to upgrade [their operations]”.

Once again, it is crucial to note the subtle ambiguity of these phrases. Overtly, they provided a political basis for private enterprises to act as consolidators (i.e., to acquire small mines) and for increasing private investment in coal. However, because the phrases (and the passages from which they are taken, as well as the *Plan* as a whole) say nothing about whether such participation by privates (or electricity, etc., producers) could involve *controlling* ownership (控股), there was nothing to stop provinces claiming full adherence to this stipulation while restricting privates to non-controlling ownership. In other words, at the limit, it would be perfectly consistent with the document’s language to nationalize most private mines and while simultaneously expanding the scope for private non-controlling investment, for instance through stock market listings of state coal firms.

The treatment of electrical-power, smelting and chemicals firms – irrespective of ownership – during coal-industry consolidation is indicative in this regard. Downstream integration of coal mining with power production, smelting and chemicals had been a long-standing objective of the NDRC. Thus we see the above phrase also encouraging the participation of firms from these industries. When Shanxi began nationalizing its coal industry in 2008, the key policy document also stipulated that power, smelting and chemicals companies were “encouraged” to participate coal-mine consolidation, but added that they were to be restricted to taking non-controlling equity stakes (Shanxi 2008a). It is not entirely clear why Shanxi instituted this restriction,³⁷ but the point

³⁷One likely reason is that Shanxi wanted mines to be operated by firms with expertise in mining. The well-known phenomenon of “local protectionism” probably also played a role: Shanxi (and Henan) were at pains to prevent non-Shanxi (non-Henanese) firms – such as the big central state-owned power and steel firms – from acquiring valuable coal mines. These were to be reserved for Shanxi (Henan) SOEs. Cf. Chapter 5.

here is that “encouraging participation” was not incompatible with restricting this participation in important ways.

2.9 Central Policies and Provincial Responses

This chapter has set out how central government policy evolved from the 1980s to the 2000s. As we saw, by 2000 the Center had abandoned its earlier support for the TVMs/private mines. Instead, central officials now demanded that regulation be tightened and, ideally, that this sector be largely eliminated and the industry consolidated under large firms – with many at the Center expressing a strong preference for these large firms to be state-owned enterprises, though this remained controversial. But to what extent were these demands implemented by the provinces?

Closing down the TVMs was fundamentally contrary to the interests of local (sub-provincial) governments, and tended to be resisted fiercely by them (Chapter 4). Nevertheless, from about 2005 on – and in Shanxi already from mid-2003 on – regulatory oversight *was* tightened and significant consolidation of the sector pushed through. This timing is significant: while the Center had been pressing these policies on the provinces from at least the *Tenth Five Year Plan* (2001) onwards, serious action at the provincial level only began several years later and, we will see, in response to rising media coverage of accidents. Moreover, until 2008/2009 the consolidation actually implemented in *all* of the case-study provinces departed in crucial ways from what central-government bureaucracies had been pushing for: instead of either closing the private mines or having large state companies acquire them, the provinces until 2008 mainly carried out “local consolidation”; viz. merging the small mines *among each other*. This had the crucial advantage of leaving the flow of rents and profits largely unchanged. While “local consolidation” was *not* the preferred outcome of the Center (or at least of the dominant groups at the Center), central policy makers do not seem to have felt able to *force* provinces to make contrary policy choices if they did not wish to do so. For instance, although the *Twelfth Five-Year Plan* singled out Shaanxi by name and urged the province to consolidate coal mining under already-existing large-scale enterprises, this is *not* what Shaanxi would do, even in 2012/2013. On the contrary, the province stuck to local consolidation, and even this seems to have often involved a substantial element of make-believe, with localities declaring mines to have been merged or closed that had not in fact been so (Chapter 5).

Provinces’ scope for independent policy choice appears to have been greatest with regard to the question of ownership and nationalization. As one Chinese academic emphasized to me, the existence of so many contradictory but formally equally-authoritative documents and pronouncements meant that provinces could easily justify both nationalization and the preservation private ownership as being in line with “the spirit” of the Center (Interview 65). For example, Henan fairly blatantly disregarded the “New 36

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Articles”, which were issued in the very weeks when Henan was beginning coal-industry nationalization. Far from discouraging Henan from pursuing nationalization, just five days after the “New 36 Articles” appeared, the province issued a missive of its own, demanding that the local governments *speed up* nationalization. Conversely, just a few weeks earlier, in April 2010, senior Shaanxi officials stated publicly that Shaanxi would *not* follow Shanxi’s policy, despite the NDRC and NEA’s recent endorsement of the “Shanxi model”. Rather, a significant space for the private coal sector would be preserved (Chapter 5).

The larger point is that even State Council documents, *by themselves*, did not provide a very strong motive force for change, given the strength of local authorities’ interest in preserving the status quo. Significant change did come, but as we will this was above all a result of the intense media coverage of coal-mining accidents that began in the early 2000s, and the way this interacted with the party-state’s disciplinary system. This is not to say that the Center and central documents and pronouncements were irrelevant, but that the political pressure created by the intense publicity that accidents began to receive, created a political context in which central demands could become effective. We now turn to this next.

Chapter 3

Media Coverage of Accidents, Social Stability, and the Disciplinary System

3.1 Summary of the Argument and Chapter Outline

This chapter is about the coverage of mining disasters in the Chinese media and its political consequences. It seeks to answer three main sets of questions:

- Why did coverage rise substantially in the 2000s? How come this coverage was possible in an authoritarian state famed for its control of the media and what role (if any) did the state play in stimulating it?
- Why did coverage focus particular heavily on Shanxi and to a lesser extent Henan, even though their coal industries were actually safer than those of many other provinces?
- What were the political consequences of this coverage?

The chapter is organized into six sections. Section 3.2 analyzes the quantitative and qualitative features of the media coverage. It demonstrates that reporting on accidents rose sharply after 2001, remaining high throughout the 2000s, and that coverage focused overwhelmingly on accidents in Shanxi and to a lesser extent Henan. Regarding its qualitative features, Section 3.2 shows that reporting was often sensationalistic and closely associated accidents with local-government corruption. Again, Shanxi was particularly affected by this. The province acquired a negative reputation as a place of accidents, corruption, poor governance, and “blood-stained GDP”.

Section 3.3 discusses why accident coverage rose so sharply, and why intensive coverage of such a serious socio-economic and political problem was possible in an authoritarian state. On one level, coverage seems to have been a result of larger changes in China’s media environment in the late 1990s and the years of the Hu Jintao administration (2002–2012) that, during these years, created a space for coverage of “negative news” (news about societal, economic and political problems, conflicts and contradictions). These changes included media commercialization, the growth of a culture of critical investigative journalism, institutional gaps in the censorship regime, and a qualified willingness of the state to strategically permit investigative journalism and a somewhat more open media environment. The media had financial and ideational reasons for covering shocking stories like large accidents and the corruption that lay behind them, and these stories fitted the format of tolerated “negative news” rather well. However, accident coverage was also repeatedly encouraged by state officials and largely supported central-state policy objectives. This does not mean that coverage was the result of systematic state instigation. Rather, state and media interests partially overlapped. Given this, there was no need for the state to issue orders to get useful coverage. While hard to prove, it is likely that there were also feedback mechanisms at work, with

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officials responding to media coverage of accidents by emphasizing work safety, thereby legitimizing and encouraging further coverage. Yet the authorities always remained very wary of the potential for emotionally-charged coverage of disasters to inflame public opinion (舆论) and public emotions (舆情), leading them repeatedly to curtail coverage, something taken up further in Section 3.5.

Section 3.4 examines why Shanxi and Henan attracted so much coverage. This appears to have been the unintended consequence of decisions by media workers concerned with the relative news value and opportunity cost of covering different accidents. While statistically among the safest in China, Shanxi's coal industry suffered many very large accidents, whose news value was further abetted by perceptions about the wealth of Shanxi coal bosses. Well-developed communications infrastructure and Shanxi's relative geographical vicinity to Beijing made coverage cheap and easy. The same is true of Henan. There is no evidence that state orders to the media played any kind of role.

Sections 3.5 and 3.6 turn to the political consequences of coverage. As Section 3.5 explains, Chinese authorities considered major accidents to be a threat to social stability, on account of their potential to generate and serve as focal points for public anger. Media coverage and publicity about accidents was central to this concern: By the mid-2000s, much news reporting and consumption had migrated online, and readers increasingly had access to powerful internet and mobile communications technologies. Inflammatory news, commentary and rumor about accidents and other so-called “sudden incidents” (突发事件 – that is, natural and man-made disasters and accidents, scandals and other emotive social or political incidents, protests, public safety threats, etc.)¹ could therefore spread very rapidly, especially among the most engaged sections of society. This made accidents a threat to social stability.

The state responded in three ways. Firstly, the state tried to increase its control over how accidents (and other “sudden incidents”) were covered. In part, this involved stepped-up media restrictions, but the focus was as much on more subtle techniques to gain control of the public narrative and manage public emotion, a strategy the state referred to as “public opinion channelling” (舆论引导) (Section 3.5).

Secondly, the state intensified its use of the formal disciplinary system, to “hold accountable” (问责) local officials for accidents. This is the topic of Section 3.6. From 2001 through to 2009, the Center issued a flurry of documents that specified more precisely than ever before the safety/accident-related responsibilities of local leading officials and the disciplinary sanctions threatening them if they failed in these duties. One motive for this was surely to encourage officials to take work safety more seriously and implement the copious policy measures the Center released to this end. But disciplinary practices seem to have been driven as much by a political as a functional

¹China's Sudden Events Response Law (突发事件应对法) defines sudden incidents as “natural disasters, accidents, public health incidents, and public security incidents” (自然灾害、事故灾难、公共卫生事件、社会安全事件, my emphasis).

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logic. Disciplinary regulations systematically singled out large accidents (i.e. those liable to draw high levels of public attention) and those that for other reasons drew intensive media/public attention for particular punishment. This makes little sense from an occupational-safety perspective and is at odds with contemporary Western safety-management practices. However, from the perspective of regime concern with avoiding destabilizing “sudden incidents” this focus is arguably rational. Moreover, there is strong evidence that the application of punishments after individual accidents was quite sensitive to the level of public attention the accident had garnered. Holding senior local officials accountable was used to “pacify popular fury” (平息民愤). In other words, the way formal disciplinary procedures were actually implemented in practice further reinforced this institutional focus on locales struggling with large accident and subject to intensive media coverage. Conversely, locales with objectively worse safety records but fewer large, attention-generating accidents seem to some extent to have flown under the radar. Thus, Shanxi officialdom seems to have been hit particularly severely by disciplinary sanctions, compared to other locales, on account of the province’s many large and well-covered accidents.

Thirdly, provincial and central authorities took aggressive measures to solve the safety crisis in the industry, including stepped-up efforts to restructure the entire coal industry and close down the private small-mine sector, where accidents and associated problems (pollution, corruption) were concentrated. That will be the topic of the following two chapters, where we will see that the safety crisis and major, intensively-covered individual accidents repeatedly served as policy catalysts leading to increasingly radical efforts to restructure the industry.

3.2 Media Coverage of Mining Accidents

This section examines how China’s media covered mining accidents. Because the Chinese media landscape is quite complex, the first subsection (Section 3.2.1) provides some background information on its structures. Section 3.2.2 describes quantitative data on coverage patterns. Section 3.2.3 discusses qualitative features of this coverage.

3.2.1 China’s Media in the 2000s: Party Papers, Commercial Papers, and Web portals

Since the late 1990s, China’s media landscape has been shaped by the interactions of marketization, the internet, the decentralized character of much of China’s political and administrative machinery, and the party-state’s efforts to simultaneously control public discourse and prevent the build-up of strong negative public emotions, build profitable

media outlets capable of attracting and persuading readers in a rapidly changing, pluralistic society, and provide mechanisms for the (controlled) expression of public opinion, societal debate and monitoring of local officialdom. As the Hongkong-based media scholar and former managing editor of *Southern Weekend* (a major weekly paper), Qian Gang, puts it, the conjunction of these forces has produced a media landscape marked by control, change, and chaos (quoted in Frenkiel 2011).

This study focuses on newspapers and web portals, because data on their coverage of mining accidents could be readily obtained for the entire 2000s and the late 1990s (something not the case for TV programs) and because web portals and newspapers, both in their hardcopy and online formats, continue to be one of the main sources of news and sites for the formation and expression of public opinion in China. Social media such as the twitter-like Weibo and the mobile messaging service Weixin/WeChat were not studied, because while very important today, they only appeared in 2009 and 2011, respectively, when many of the events this study deals with had already taken place.

3.2.1.1 Newspapers

Chinese and Western scholars and media workers commonly divide Chinese newspapers into “party” and “commercial” media (党报 and 市场媒体).² Generally speaking, party media are directly owned and supervised politically by party-state institutions (for instance, the *People’s Daily* is owned and supervised by the CCP Central Committee, and the *Southern Daily* by the Guangdong Provincial Party Committee). “Commercial” newspapers were mostly set up by these party papers in the 1990s and 2000s as more market-oriented subsidiaries, and are supervised in the first instance by the party or “mother” paper (母报). For example, *Southern Metropolis Daily* is a subsidiary of the Southern Daily Media Group. The distinction between party and commercial media is extremely important. Party papers primarily serve as mouthpieces of the party or state institution that owns them (e.g., the Guangdong Party Committee) and have to pay relatively little regard to general readers’ interests as they can rely on block subscriptions from party-state institutions and, probably, also other direct and indirect subsidies.³ With few exceptions, their style and content is often rather staid and focused primarily on the activities of political leaders and intra-party debates, and they tend to shy away

²This paragraph is based on Qian and Bandurski 2011, Stockmann (2012: pp. 50–74), Tong (2011: esp. pp. 31–48), Zhao 2004, Liebmann (2005: esp. pp. 14–64), Zhao and Sun 2007, and the online essays, commentary and interviews with senior Chinese editors, journalists and columnists published by Hongkong University’s China Media Project, in particular Bandurski 2010b, 2011a, 2011b and 2012a and Qian 2009.

³On the issue of subsidies, see Stockmann (2013: p. 68). Most party papers seem to be no longer sold at newsstands: even in Beijing, my attempts to purchase a copy of *People’s Daily* were met with amused befuddlement by newsstand operators.

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from more boundary-pushing investigative reporting or commentary.⁴ Commercial papers, conversely, rely entirely on advertising and sales to individual readers, mostly via newsstands, for their financing. After all, they were usually set up with the primary aim of earning revenue for their superordinate party papers. Given China's crowded media market, they are thus exposed to high levels of competition. Stylistically and content-wise, they offer lively fare, often in tabloid format, and have been much more willing than the party papers to publish content that is in some sense critical or controversial, as a way of attracting readers. There is also some evidence that, until the advent of the Xi administration at least, censorship authorities sometimes deliberately left commercial papers on a looser leash than party papers (Stockmann 2013: p. 78; Distelhorst 2013: p. 52; Tong 2011: p. 38). We will return to these issues when discussing the questions of media controls, censorship and state direction of accident coverage in Section 3.3.

Most commercial daily papers are classified as “local” media in China’s regulatory system, meaning that they are owned and supervised by provincial or municipal authorities and their *hard copy* circulation is limited, by regulation, to their region of publication. For instance, *Southern Metropolis Weekly* is generally not sold at newsstands outside of Guangdong. However, the outsized role that the internet and specifically web portals have come to play in news consumption and distribution in China means that these restrictions have become increasingly irrelevant: “local” papers maintain large online presences that can be accessed anywhere, national web portals freely distribute and link to their content, and the fragmented censorship structures incentivize “local” papers to cover events outside of their region of circulation (Reilly 2012: p. 34).

⁴Indicating how complex China’s media landscape has become, the last point, while still generally true, already requires partial qualification. Competition from the commercial media has at times pushed party papers towards more controversial and sensationalist reporting (Bandurski and Hala 2010: p. 5). By the late 2000s party newspapers had also set up online presences aimed primarily at ordinary readers that are much more lively and sensationalistic – and less politically authoritative – than their hard-copy versions (e.g. *People’s Daily Online*). At least partly as a response to the rise of commercial media and rapid online communication flows, media policy in the last years of the Hu administration increasingly emphasized the need for party media to aggressively engage ordinary readers (i.e., attract them) and proactively set the news agenda. The best analysis of these developments comes from the scholars associated with Hongkong University’s China Media Project; see Bandurski 2008a, 2009a; China Media Project 2010.

3.2.1.2 Web portals

Unlike newspapers (and TV or radio), which are effectively all state-owned,⁵ web portals are private companies.⁶ Four portals dominate the Chinese internet: Sina, Tencent (QQ.com), Netease, and Sohu. They were set up in the late 1990s, and are somewhat akin to companies like Yahoo, in that they provide a range of services besides news (e.g. email, chats, blogging, gaming etc.). Unlike Yahoo, though, news provision is a key service, and they maintain large newsrooms and editorial departments. All four are among the most frequently accessed websites in China and count among the primary news sources for China's hundreds of millions of internet users.⁷ Chinese law prohibits portal websites from engaging in independent reporting of their own. They are restricted to publishing content generated by registered domestic news media (newspapers, TV, etc.). In practice, portal newsrooms are under strong market pressure to find ways around this restriction to generate what is de facto original content, in order to "draw eyeballs" (吸引眼球, that is, readers), and advertising revenue. Strategies have varied over time as portals and censorship authorities engaged in cat-and-mouse games and have included everything from creating hard-hitting commentary sections (commentary not being classified as news), writing own content and "laundering" it through registered newspapers, generating novel content through collages of extant materials, judiciously selecting local news stories and giving them national exposure to highlight wider social, political or economic issues, re-writing headlines to highlight controversial or sensationalist elements of stories, and creating special-features pages where extant articles and images could be creatively juxtaposed to deliver specific messages.⁸ State

⁵All newspapers and magazines in China must be sponsored by a "management institution" (主管单位), which has ultimate political and leadership responsibility for the publication, and to which the relevant press and publication licenses are issued. Only state units can serve as "management institution". Thus, while some newspapers and magazines have private investors (in rare cases, even private controlling shareholders) ultimate control always remains with a state entity.

⁶This paragraph is based on Distelhorst (2012) and (2013: pp. 31–54), which are the most extensive empirical analyses of the Chinese web portal industry and its editorial practices I am aware of. See also Yuen-ying Chan (2010) for a good summary of the basic issues.

⁷As of January 2013, Alexa ranked Tencent (QQ.com) as the 2nd most popular website in China, Sina as the 4th most popular, Netease the 6th and Sohu the 9th. 80% of Chinese internet users report using the internet to access news. As of end 2010, some 450 million Chinese citizens had internet access (Distelhorst 2013: pp. 34, 51).

⁸The following example provides a flavor of these practices: In late 2006, *China Youth Daily* (*CYD*, a party newspaper) revealed that the Coal Mine Safety Inspectorate of Xinzhou City (忻州市) in Shanxi had built itself vast office and residential buildings and was constructing a hotel, and possessed 9 staff cars for its 10 staff members. *CYD* reported this under the headline "The Happy Troop from the Xinzhou Coal Mine Safety Inspectorate." The portal Sohu promptly created a dedicated "special page" (Sohu 2006), changing the headline to "10 Staff Members Live in This Huge Building!" The special page featured prominently-placed news stories about coal-mine disasters in Xinzhou – highlighting that three accidents killing 91 miners had happened there in 2005 and 2006 – with large accompanying photos (distraught relatives, recovered corpses), and further news stories about local government corruption ("Behind Big Mining Accidents: Investigating Collusion between Officials and Mine Owners"). Finally, information about the income distribution in Shanxi headlined "Low Income Households are Unable

supervision of the portals increased substantially over the 2000s, but it took the authorities until about 2007 to develop effective supervisory mechanisms. Even afterwards, portal editors continued to constantly test the limits as during the Hu-Wen years, at least, penalties for exceeding them were generally low (requests to take down offending content or no longer feature it on the front page; modest fines) and controversial stories generate valuable traffic even if they are up for as little as an hour. At the same time, the regulators themselves appear to be unwilling to fully eliminate controversial news content from the websites. We return to these issues in Sections 3.3 and 3.5.

3.2.2 Quantitative Analysis of Coverage Patterns

3.2.2.1 Source Selection

To trace how coverage of mining accidents evolved, I selected 4 newspapers with national reach as well as the Sina web portal. The newspapers are the *People's Daily*, *China Youth Daily*, *21st Century Business Herald*, and *Southern Metropolis Daily*. The logic behind this selection is as follows. Little reliable information exists about Chinese newspapers' circulation figures. Some data are now published by market research companies. However, not only are these likely to be based on unreliable sources (Stockmann 2013: p. 65),⁹ but the large block subscriptions of state newspapers and the fact that since the early 2000s news is heavily consumed online in China, with newspaper articles shared and re-posted far more freely than in the West, means that it is questionable how meaningful circulation figures really are, even if they are technically correct (something that cannot be assumed).¹⁰ Therefore, I selected newspapers based on their perceived influence in the national conversation, as identified through scholarly literature and conversations with Chinese journalists and academics. The search function of the Sina portal allowed me to verify whether the coverage trends observed in the selected newspapers were representative of coverage more broadly, as Sina links

to Make Ends Meet" was placed directly beside photos of the Inspectorate's buildings. Thus, just by collecting and juxtaposing extant materials, Sohu created a powerful indictment of official negligence and corruption while playing on widespread resentments in Chinese society about shortages of affordable housing and perceptions that the main beneficiaries of economic growth had been the official class.

⁹Stockmann notes that even Chinese journalists usually "have only very general ideas of [who] their own readers [are]" (2013: p. 65). Danwei.com, one the best research and consulting companies specialized on China's media industry, notes that its estimates of circulation figures are "guesstimates" that "should be taken with a pinch of salt, for reference only." (Danwei 2013).

¹⁰Based on interviews with editors, Stockmann claims that circulation numbers are routinely exaggerated (2013: p. 65). Danwei.com reported that in 2013 *People's Daily* had the second-largest circulation in China, with 2.8 million subscriptions (Danwei 2013). Mondo Newspapers reported the identical figure in 2009 (Mog-Sidor 2012: p. 47). However, the *People's Daily* seems not to be generally sold at newsstands: the high circulation numbers derives from block subscriptions by state institutions, most of whose employees are unlikely to read the paper much (cf. Liebmann 2005: p. 21).

to most of the internet presences of Chinese news and media organizations, and is itself one of the most frequently accessed news sites in China.¹¹

The *People's Daily* was chosen because, as the voice of the Central Committee, it is the most politically-authoritative paper in China. Its coverage provides insights into the priorities and concerns of the Center. *China Youth Daily* was chosen as a second party paper, albeit one with a more liberal reputation than the *People's Daily*. It is owned by the Communist Youth League, but unlike most party papers, it does not function as a mouthpiece for its owner and enjoys relatively greater autonomy than party papers commonly do to engage in investigative journalism and promote a liberalizing political line (Cui et al. 2011; Qian Gang 2005; Stockmann 2013: pp. 71–72; cf. Bandurski 2007a, 2007b, 2010a). *Southern Metropolis Daily* is one of China's leading commercial newspapers and played a pioneering role in developing a harder-hitting investigative journalism (Tong 2011). Like *Southern Metropolis Daily*, *21st Century Business Herald* is a commercial paper owned by the Southern Daily Group, and has established a reputation for independent and investigative reporting. It is primarily a business publication. (Cui et al. 2011; Stockmann 2013: p. 71). *People's Daily* and *China Youth Daily* are published in Beijing; *Southern Metropolis Daily* and *21st Century Business Herald* in Guangzhou. While not in itself representative of the Chinese media industry, the selection does include widely read and highly respected state and commercial newspapers.

3.2.2.2 Coverage of Coal-Mining Accidents Across China

Figure 3.1 graphs the number of articles that mention accidents in coal mines published each year in the four newspapers from 1995 to 2011. Figure 3.2 provides this information for online newspaper articles and multi-media products (videos, photo slideshows, etc.) accessible via the Sina.com portal.¹² Three points should be noted about the coverage patterns. Firstly, coverage of coal-mining accidents increased dramatically after 2000,

¹¹As of January 2013, Alexa ranked Sina as the 4th most popular website in China (Distelhorst 2013: p. 34). Danwei.com reports that the portal had some 40 million unique daily visitors as of February 2014 (Danwei 2014).

¹²The data were collected through full-text (i.e., not title-only) searches of all four newspapers, performed via their online archives in the case of *China Youth Daily* (<http://search.cyol.com/advsch.htm>, searched 4 to 14 October 2012) and commercial data bases for the rest. (Oriprobe Information Services [www.oriprobe.com] for *People's Daily*; WiseNews [www.wisers.com] for *Southern Metropolis Daily* and *21st Century Business Herald*.) The data bases were searched from 1995 or the earliest date otherwise available (2000 for *China Youth* and *Southern Metropolis*; 2001 for the *Business Herald*) up to 2011. Two separate search commands were used; viz. “coal mine AND accident” (煤矿 AND 事故) and “coal mine AND mining accident” (煤矿 AND 矿难). All search results were checked by hand to prevent double-counting of articles and eliminate spurious hits. The cleaned results were

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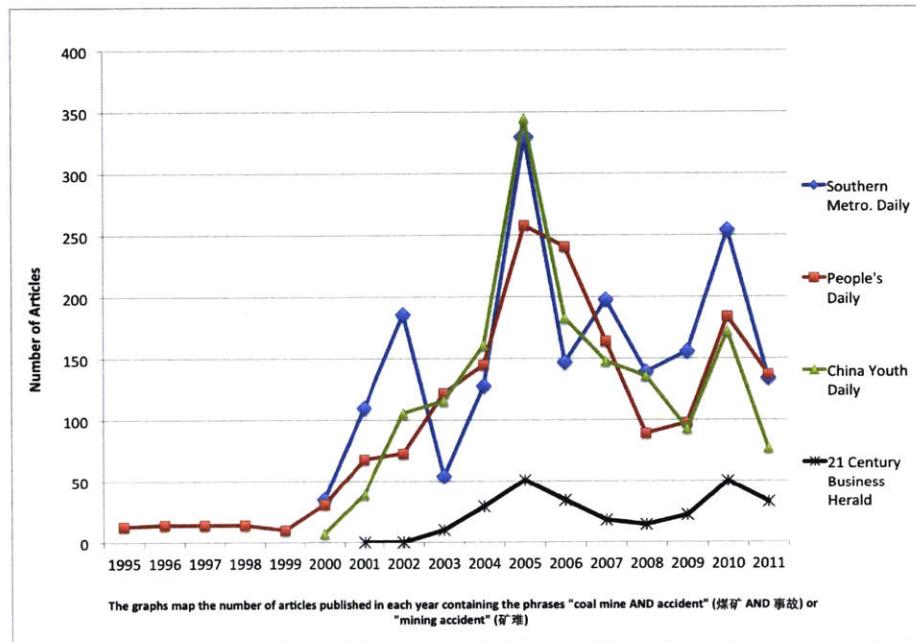


Figure 3.1: Coverage of Mining Accidents in 4 Newspapers, 1995 – 2011

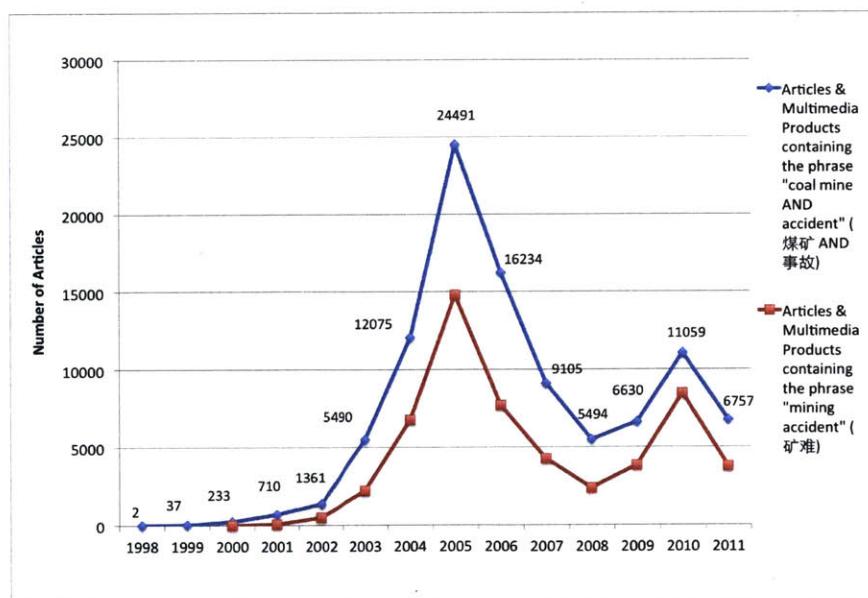


Figure 3.2: Mining Accident Coverage Accessible via Sina.com, 1998 – 2011

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and remained high through to the end of 2011. While coverage data for the 1990s are limited, what data are available suggests that coverage during the 1990s was low. Firstly, the Sina portal seems to have covered accidents little in 1998 and 1999: had accidents been covered intensively in the press, this would almost certainly have shown up on Sina. Secondly, accident coverage in the *People's Daily* was low before 2000. After 2000, the volume of coverage by the *People's Daily* and by other outlets correlates relatively closely. There is no obvious reason why it should not have done so before 2000 as well, suggesting low coverage in general. Thirdly, as discussed further in Section 3.3, interviewees consistently attributed the growth in coverage of accidents to the development of the commercial media, which only began in the late 1990s.

The second main point to note about coverage patterns is that they are relatively, albeit not completely, similar across the four newspapers and Sina. Coverage rose sharply after 2000, reaching an all-time high in 2005, after which it fell somewhat until 2009, with a new surge in 2010.

The third point to note concerns differences in coverage intensity. *Southern Metropolis* seems to have covered accidents most intensively, with at least 1871 articles that mention mining accidents published from 2000 to 2011. The two party newspapers published somewhat fewer articles, with *People's Daily* publishing 1610 and *China Youth Daily* 1583: 14% and 15.4% fewer articles, respectively, than *Southern Metropolis*. The WiserNews database is apparently incomplete for *Southern Metropolis* for the year 2003, suggesting that the apparent drop in article numbers published by *Southern Metropolis* in 2003 relative to other outlets may reflect incomplete data (i.e., that *Southern Metropolis* actually published more articles in 2003 than show up in my data).¹³ If 2003 is excluded for all papers, the difference becomes slightly more pronounced, with 1817 articles published in *Southern Metropolis* in the time period 2000 to 2002 and 2004 to 2011, versus 1488 and 1467 published in *People's Daily* and *China Youth* (18% and 20% less). This difference in coverage intensity is arguably what we should expect, namely that a commercial paper with a culture of reporting “negative news” like *Southern Metropolis* should give more space to accidents than the party papers. *21st Century Business Herald*, finally, has the fewest articles by a wide margin, which most likely reflects its business rather than general-interest focus.

then added together for each year and newspaper. The Sina Portal was searched via its online search tool (<http://search.sina.com.cn/?c=adv>) on 30 November 2012. The search commands used were “煤矿 AND 事故” and “矿难” respectively, but due to the vast number of hits returned, these were not further cleaned. Instead, results from the two search commands are shown separately. Prior analysis of the newspaper search results had shown that spurious hits (e.g. a report on a traffic accident close to a mine) were likely to be very few.

¹³Personal communication from Qian Gang, the director of Hongkong University's China Media Project, who is a former chief editor of *Southern Metropolis*' sister paper *Southern Weekend*, and who has used the WiserNews database extensively in his own research; Interview with a senior journalist from *Southern Metropolis Daily*

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Newspaper	Southern Metro.	People's Daily	China Youth Daily	21 CBH
Articles	1871	1610	1583	261
Articles excluding 2003	1817	1488	1467	251

Table 3.1: Number of Articles Mentioning Mining Accidents in 4 Newspapers, 2000 - 2011

3.2.2.3 Coverage of Mining Accidents in Different Provinces

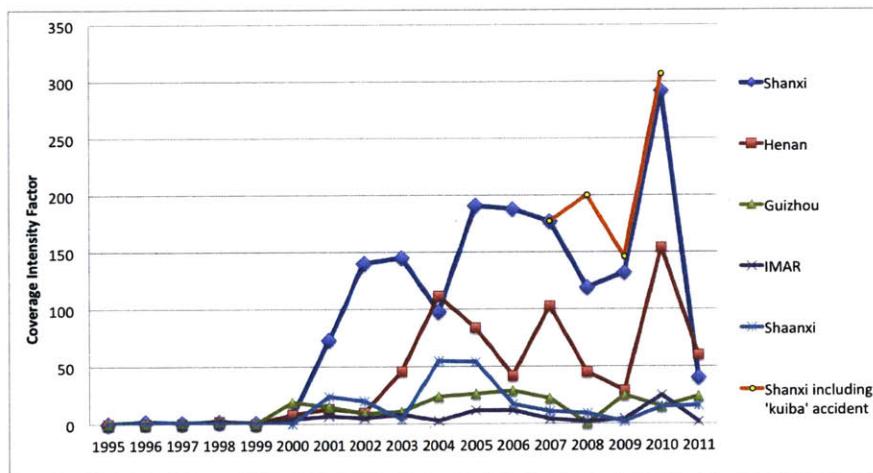


Figure 3.3: Coverage of Accidents across Case-Study Provinces in 4 Newspapers

Figures 3.3 and 3.4 compare the level of coverage that coal-mining accidents in the five case-study provinces received in the four newspapers and in coverage accessible

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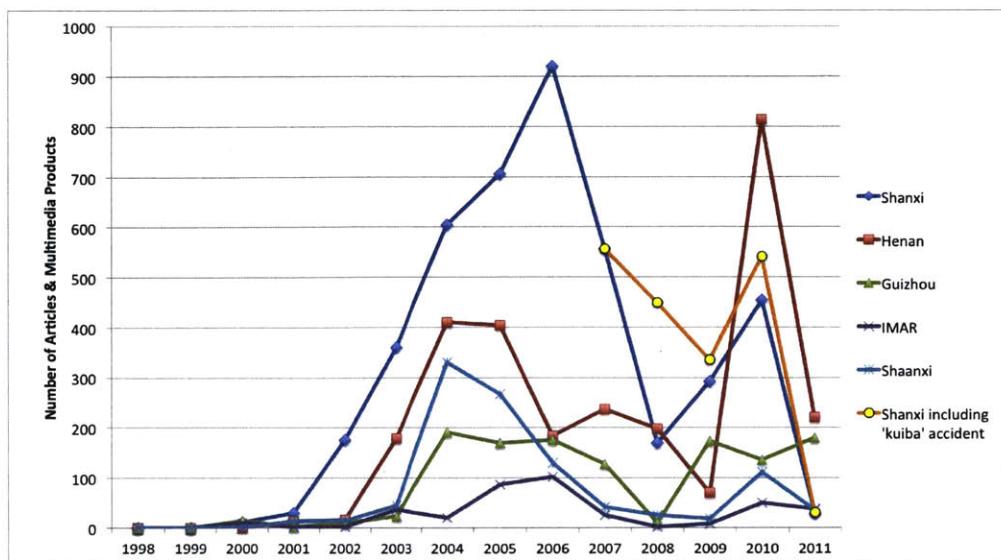


Figure 3.4: Coverage of Accidents across Case-Study Provinces Accessible via Sina.com, 1998 - 2011

via the Sina.com Portal. For the newspapers, coverage is compared by calculating a Coverage Intensity Factor (CIF). This was constructed by first carrying out full-text searches of the newspaper archives and then reading and coding all returned articles by hand.¹⁴ False hits were eliminated and the articles divided into two sets: Firstly, “articles mainly about coal-mining accidents in [Province]”¹⁵; secondly, “articles that only make passing reference to coal-mining accidents in [Province]”.¹⁶ The CIF was then calculated by giving each article from the first set a value of 2, and each article from the second set a value of 1, and summing the values for every year. For Sina, I conducted both headline (title) searches and full-text searches. For the headline searches, I used an expanded set of search commands that included words for the most common types of accidents (explosions, roof falls, etc.).¹⁷ Results were checked to eliminate double counting. Calculating a “Coverage Intensity Factor” in the above

¹⁴The search commands were “[Province Name] AND Coalmine AND Accident” ([省] AND 煤矿 AND 事故) and “[Province Name] AND Mining Accident ([省] AND 矿难).

¹⁵That is, articles whose primary purpose was to report, analyze or comment on coal-mining accidents in [Province], i.e. news stories about a specific accident in [Province], background pieces on coal-mine safety in [Province], and shorter notes reporting the occurrence or subsequent developments to do with a specific accident like rescue operations, criminal investigations into its causes, etc., or articles that take the form of lists of mining accidents where one third or more of the accidents is drawn from [Province].

¹⁶I.e. articles which mention accidents in [Province] but are not primarily about accidents or mining safety in [Province], e.g. articles about coal mining in [Province] or elsewhere that make passing reference to accidents in [Province], articles about other topics that make passing reference to accidents in [Province], or articles with lists of mining accidents with less than one-third drawn from [Province].

¹⁷The search commands were: “[Province] AND Coalmine AND Accident” ([省] AND 煤矿 AND 事故), “[Province] AND Mining Accident ([省] AND 矿难), “[Province] AND coal mine AND explosion”

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manner has a necessarily subjective element to it, but since the results are basically identical to the results produced by the Sina searches – where no subjective judgement was required – I am not worried about this.

As can easily be seen, both in the examined newspapers and on Sina, accidents in Shanxi were covered much more intensively than accidents in the other provinces, though accidents in Henan were covered heavily, too. Guizhou, Shaanxi, and Inner Mongolia received far less coverage. Figure 3.3 summarizes all four papers' coverage, but the same pattern is found in each of the papers when examined separately: accidents in Shanxi received the bulk of the coverage, with Henan the runner up.

The searches occasionally picked up accidents in non-coal mines (gold, iron ore, etc.). Almost all of these accidents, in fact, occurred in Shanxi. They were excluded from the ordinary graphs. However, for Shanxi, I added a separate graph which includes the coverage generated by the “kuiba” (溃坝, “dam burst”) accident in September 2008, where the dam holding a tailings pond at an illegal iron ore mine collapsed, inundating a village and killing 277. While not technically a coal mine accident, interviewees – including interviewees who were well aware that this was not a coal mine accident – frequently mentioned the “kuiba” accident when discussing the safety crisis in Shanxi’s coal industry. The “kuiba” accident came after the decision to nationalize Shanxi’s private mines was taken. Local experiments with nationalization also preceded the “kuiba” accident. However, as we will see in Chapter 5, the accident does seem to have given further impetus to that decision, and therefore I included a separate graph showing its coverage here. In no other province was there a non-coal mine accident even remotely comparable to Shanxi’s “kuiba” accident in terms of size or coverage generated.¹⁸

The five case-study provinces are China’s largest coal-producing provinces. Figure 3.5 and Table 3.2 use data from Sina to compare the coverage of mining accidents in Shanxi and Henan with coverage of accidents in the five next-largest mining provinces *after* the case-study provinces – Shandong, Anhui, Hebei, Heilongjiang and Sichuan. Together with the case-study provinces, these account for around 80% of China’s coal production. Again, we see Shanxi and Henan receiving the bulk of the coverage. After Shanxi and Henan, the two most-covered provinces were Hebei, Heilongjiang, Guizhou and Shaanxi. But coverage of them was far behind Shanxi and Henan: about four times as many articles and multi-media products (called “Coverage Items” in Table 3.2) were published about Shanxi accidents and more than twice as many about Henan accidents as about accidents in Guizhou, Hebei, Heilongjiang and Shaanxi.

(爆炸), “[Province] AND coal mine AND roof fall” (冒顶), “[Province] AND coal mine AND inundation” (透水), “[Province] AND dam burst” (溃坝).

¹⁸The largest non-coal mining accident outside of Shanxi that I am aware of was an accident at an iron-ore mine in Inner Mongolia in 2007, which killed 29.

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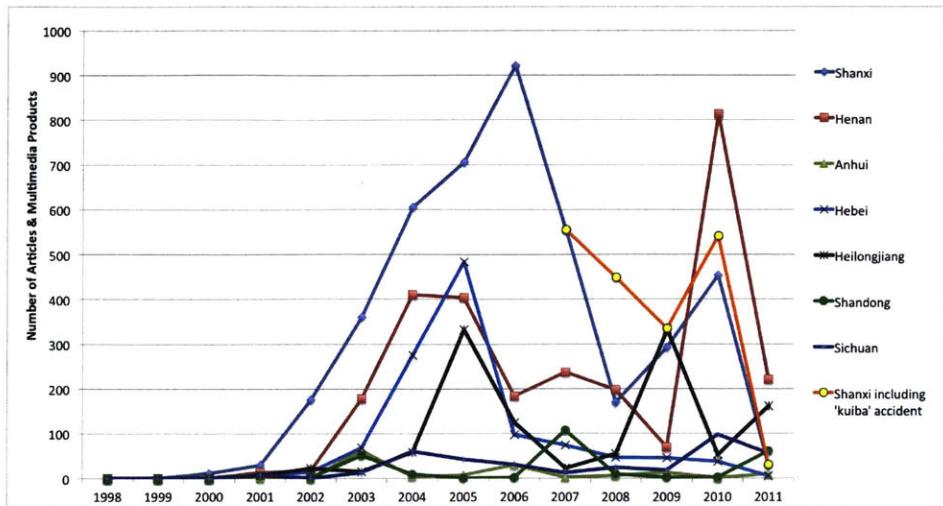


Figure 3.5: Coverage of Accidents in Main Coal-Producing Provinces accessible via Sina, 1998 – 2011

Province	Shanxi	Henan	Guizhou	Heilongjiang	Hebei	Shaanxi	IMAR	Sichuan	Shandong	Anhui
Coverage Items	4721	2746	1214	1184	1155	1033	383	363	250	135

Table 3.2: Total Number of Articles and Multi-Media Products Accessible via Sina.com, 1998 - 2011

Sections 3.3 and 3.4 will examine in more detail the question of what caused this explosion in the coverage of mining accidents, and why Shanxi and Henan received the bulk of the coverage. But two points should be made now. Firstly, rising coverage of accidents both nationwide and in Shanxi and Henan in particular, was *not* a response to declining mining safety: as Figures 3.12 and 3.14 in Section 3.4 below will show, safety indicators and fatality numbers changed little from the 1990s until the early 2000s, after which they began to *improve* rapidly and substantially. As we will see,

this is true also when the data are disaggregated to the provincial level. Secondly, we will see that while Shanxi and Henan got the bulk of the coverage, their coal industries were not the most dangerous – on the contrary, Shanxi’s was actually among the safest in the country. However, they both suffered disproportionately many *very large* (i.e., newsworthy) accidents. Before turning to these issues, though, we should examine some of the qualitative features of the coverage.

3.2.3 Qualitative Features of the Coverage: “Black-hearted Bosses” and “Blood-stained GDP”

After 2001, coal prices rose sharply – by several hundred percent between 2001 and 2008 – due to persistent energy shortages and strong economic growth. With mine-mouth profits as high as RMB 50 to RMB 200 per ton (*Caijing* 2003, *Beijing News* 2004), many coalmine owners swiftly became multi-millionaires, and even billionaires. The very substantial power Chinese local governments hold over their local economies meant that this influx of money into what had previously been mostly poor rural areas provided a fertile breeding ground for corruption.

Media coverage made much of these themes. Local-government corruption and negligence was consistently portrayed as a key cause of accidents (an interpretation that was probably substantively correct). The mine owners, dubbed “coal bosses” or “mine bosses” (煤老板, 矿主), were usually portrayed in a negative light, as uneducated nouveau riche. Accidents attributed to their unscrupulous or even downright “evil” nature (“hearts blacker than coal” [黑心矿主一心比煤黑], as a recurrent phrase had it). Some quantitative evidence for the strength of these associations can be found in Table 3.3, which reports the results of keyword searches on Baidu.com, the main Chinese search engine, for search commands that link corruption and lack of scruples on the part of bosses and officials to mining accidents. As the table shows, each search command returns between 134,000 and over 1 million hits (unique webpages on which both of the searched for phrases and keywords appear).

As Figures 3.6 to 3.10 illustrate, these themes were addressed very openly and sensationalistically in the media. The background to Figure 3.6 was discussed in Footnote 8. It is a screenshot of a special-feature webpage put together by the Sohu web portal in

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Search Command	"Bureaucrat-Coal Boss Collusion" AND "Accident" ("官煤勾结" AND "事故")	"Bureaucrat-Coal Boss Collusion" AND "Blood Coal" (("官煤勾结" AND "血煤"))	"Blackhearted Coal Boss" AND "Accident" ("黑心矿主" AND "矿难")
Hits	>1,000,000	223,000	135,000

Table 3.3: Conceptual Associations (Baidu Search Results)

December 2006, about the luxurious office and residential buildings that the Coalmine Safety Inspectorate of Xinzhou City, Shanxi, had built itself with “loans” from local coal companies. The main point to note is how the page directly links local-government corruption with accidents, with reports and pictures of the buildings followed by information and pictures about recent large accidents in Xinzhou, and further reports about collusion between owners and officials (Sohu 2006). Figure 3.7 shows a December 2007 report in *Southern Metropolis Daily* about recent accidents in Shanxi and Henan. The headline reads, “How many more years of bloodstained coal?”. Figure 3.8 shows how *Beijing Youth Daily* reported a large accident in Henan in 2010. Finally, Figures 3.9 and 3.10 show cartoons by the Kunming-based studio Yuan Jiao Man’s Space (圆觉漫时空), which were posted on the Tencent web portal. The first is self-explanatory, with the well-dressed onlooker grasping bundles of red (bloodstained) banknotes representing either a mine-owner or an official. The second cartoon has a more specific context – lampooning a Henanese county party secretary for the praise he heaped on himself for his contributions to rescue work after an accident – but can also be read as a more general indictment of local officialdom’s indifference to mining accidents.

Media coverage also made much of the “coal bosses’” reputation for financial extravagance and luxurious lifestyles. Again, these tended to be juxtaposed to the accidents in their mines. For example, in 2005 the Sohu web portal published a special-feature

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Figure 3.7: *Southern Metropolis Daily*: How Many More Years of Blood-stained Coal?

平顶山煤矿爆炸 47 人遇难

胡锦涛温家宝要求千方百计救人 部分责任者被免职



Figure 3.8: *Beijing Youth Daily*: 47 Killed in Pingdingshan Mine Explosion



Figure 3.9: A Cartoonist's Take on Bosses and Mine Workers



Figure 3.10: Lampooning Local Officials' Mine-Safety Record

page about “The Coal Bosses’ Outrageous Wealth” (煤老板暴富的背后) which combined stories about conspicuous consumption designed to titivate or provoke (“Mine Boss: Luxury Flats are Too Cheap”, “Which Cars do the Rich Drive?”) with reports about the mine workers’ poverty (“Working Among the very Lowest of People”; “Selling One’s Life to Survive”) and background information about tight coal markets, coalmine privatizations (described as asset stripping), and bosses’ dependence on (corrupt) connections to local officials (Sohu 2005). These perceptions of coal bosses seem to have become remarkably prevalent. Five years after the Sohu special-feature, a journalist noted that

Driving Hummers, luxury weddings, chartering aeroplanes and buying up real estate, high stakes gambling, mistresses, mining disasters (矿难), blood-stained GDP (带血的GDP) and destroyers of the natural environment (环境破坏份子): these are the key words that have become synonymous with coal bosses. (成了他们的代名词) (*Xinan Evening News* 2010)

Unsurprisingly, given the heavy coverage of accidents in the province, Shanxi seems to have become particularly associated with these features. As the author of a book about mine owners stated, “If you mention coal bosses, everyone immediately thinks of Shanxi” (*Xinan Evening News* 2013). An interviewed journalist in fact said almost literally the same thing¹⁹, and in 2011, discussing a multi-year cadre rectification campaign *China Youth Daily* was more blunt: “because of the many accidents, Shanxi has for a long time

¹⁹Interview 45 (senior investigative journalist from commercial paper A)

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now become synonymous with blood-stained coal” (长期以来，因安全事故频发，带血的煤炭甚至成了山西的标签) (*CYD* 2011). The business magazine *Caijing* (2010c) wrote that

The combination of an unbroken stream of mining disasters, tales of astonishing wealth, and [corrupt] conspiracies between money and power [i.e., business and politics] have turned Shanxi into the greatest source of economic, political and social abnormalities in today’s China, and have made “coal boss” a byword for societal evil and moral perversion for many people (连绵不断的矿难,与令人吃惊的暴利传说及钱权合谋交织在一起,让山西成为当代中国最大的经济、政治与社会怪胎出产地,“煤老板”则被相当多的人视为社会罪恶与价值倒错的代名词)

In 2006, Shanxi’s then-governor Yu Youjun (于幼军) himself admitted to this association, when he answered a journalist’s question about what his impressions about Shanxi had been before he was posted there, by saying that previously he had known little about Shanxi, and “naturally what [he] heard was mostly negative, like that there were many mining accidents, as the newspapers were regularly reporting” (以前我对山西基本上没什么了解。至于说印象, 听到的当然是负面的居多了, 比如矿难很多啊, 报纸经常报道) (*Southern Weekend* 2006a).

Importantly for the argument of this thesis, political leaders in Shanxi seem to have perceived their province’s association with accidents and ill-behaved “coal bosses” as a serious problem. In 2011, the then-party secretary of Shanxi, Yuan Chunqing (袁纯清), stated that “mining accidents, the vaccination scandal, coal bosses, and the earthquake rumor have all harmed Shanxi’s image.”²⁰ (矿难、疫苗、煤老板、地震谣言等等事件损害了山西的形象) (*CYD* 2011a). His predecessor as Shanxi party secretary, Zhang Baoshun (张宝顺), made much the same point in 2008 when he wrote that “Shanxi must absolutely not become synonymous with frequent accidents” and “absolutely does not want polluted, bloodstained GDP” (Zhang 2008a, 2008b). The following year, governor Wang Jun (王君) felt obliged to reiterate that Shanxi did not want “bloodstained GDP” (*CYD* 2009). An internal powerpoint presentation by the Shanxi Coal Mine Safety Agency noted that Shanxi had come to “epitomize” the problems of China’s coal industry (山西煤炭产业成为我国煤炭行业存在这些矛盾和问题的‘缩影’) (Huang 2011).

Comments in Shanxi party newspapers echoed these points. This is important, because provincial and municipal party papers tend to be closely controlled by and to express

²⁰The “vaccination scandal” refers to the exposure by the investigative journalist Wang Keqin in 2010 that damaged vaccines were being administered to school children on a large scale in Shanxi, causing multiple deaths. The “earthquake rumor” was indeed only a rumor, which struck several cities in Shanxi in early 2010: earthquake drills in public hospitals sparked mass rumors that a large earthquake was imminent, transmitted through mobile and online messaging apps.

views and positions closely aligned with their superordinate party committees. For example in 2009, the *Shanxi Economic Daily*, a paper owned by the Shanxi Party Committee, complained that “the frequent mining accidents, nouveau-riche ‘coal bosses’ and related negative news stories have grievously damaged the image of the province and people of Shanxi.” (更为严重的是，伴随着矿难的频发和暴富的“煤老板”等等负面新闻，山西和山西人的形象受到严重损害) (*Shanxi Economic Daily* 2009). In 2011, the *Shanxi Youth Daily*, the paper of the provincial Communist Youth League, quoted a local researcher who sought to defend Shanxi officialdom from perceptions that its “work style” was significantly worse than elsewhere: The frequent accidents meant that Shanxi officials were “in the eye of the storm”, which could lead to the impression that collusion between officials and mine owners was particularly prevalent in Shanxi – much as the accidents had already “dirtied” the name of Shanxi coal bosses. In fact, though, Shanxi governance was no worse than elsewhere, he claimed (*Shanxi Youth Daily* 2011).

3.3 The Media and the State: Why Was Intensive Coverage of Mining Accidents Possible in an Authoritarian State?

Given the high level of coverage documented above, it is clear that accident coverage was, on some level, permitted by the state. This raises the question of why this was so. Is it possible that coverage was in fact instigated by the state? This section addresses these issues. Section 3.3.1 explains the rise of investigative journalism and coverage of “negative news” (social, economic and political problems, abuses of power, disasters, etc.) in China during the late years of Jiang Zemin’s rule and the following Hu-Wen period. Coverage of mine disasters was a typical instance of this larger phenomenon. The section argues that the rise of this kind of journalism was driven by a mix of commercialization, state willingness, in those years at least, to strategically permit somewhat more open reporting, and journalistic activism and exploitation of institutional gaps in the censorship regime. The second section (3.3.2) turns to the question of covering mining accidents. It argues that while coverage received occasional encouragement from the state, it cannot be understood as simply a state-orchestrated press campaign, or the result of some sort of command being issued to the media. The media had strong incentives of its own for covering mining accidents, and the state always remained very wary of the potential for coverage to negatively affect “social” (political) stability and repeatedly intervened to restrict coverage.

3.3.1 The Commercial Media, Investigative Journalism, and “Public Opinion Supervision”

3.3.1.1 Media Commercialization and “Advocacy Journalism”

China’s media industry is today heavily commercialized, with strong competition between media outlets. While the incentives that commercialization creates for editors, managers, and the state institutions that own and benefit financially from profitable media outlets are more complex than just to encourage them to run muckraking pieces²¹, commercialization has created significant financial incentives for such coverage as papers seek to attract readers. As one Chinese journalist explained editors’ incentives: “An endless harmonious society is boring, after all.” (quoted in Reilly 2012: p. 34).²² Newspapers and magazines with reputations for critical and investigative coverage like *Dahe Daily*, *Southern Weekend*, *Southern Metropolis Daily*, *Caijing* and *Beijing Youth Daily* have been able to acquire large readerships and proved very profitable for the media conglomerates that own them – including for their parent party papers. Their success in turn has encouraged party papers to offer somewhat more lively and at times controversial fare (Bandurski and Hala 2010: p. 5; Interview 53²³).

Beyond financial incentives, there is also evidence for the formation of a professional ethos among many Chinese journalists and editors that encourages muckraking journalism. This ethos, which Hassid (2011) and Stern (2013) call “advocacy journalism”, draws on a mix of traditional literati values and modified US notions of the media as Fourth Estate. “Advocacy professionals” view journalism as driven by a social and political mission to support victims of injustice and “weak social groups” (弱势群体, essentially, losers from socio-economic transformation) and promote China’s modernization by uncovering abuses, acting as watchdogs and “speaking truth to power” (Hassid 2011, Stern 2013: pp. 63–64; cf. also Fen Lin 2010 and de Burgh 2003). Advocacy professionalism is not the only ethos current among China’s media workers²⁴ and political realities circumscribe the extent to which it can be practiced. However, especially at the

²¹ As Yuezhi Zhao (2008) has observed, dependence on advertising revenue can also encourage media to curtail investigations, lest advertisers be embarrassed, or to use the threat of negative coverage to extort advertising or simple hush-money from firms. In the case of accident coverage bribery/extortion was probably more important than the former, coal producers not being major advertisers. It even acquired an epithet – “eating mining-accident rice” (吃矿难饭).

²² Jonathan Hassid (2010: p. 66) has a similar quote from a *Southern Weekend* journalist: “Of course I have deliberately challenged the government. If you don’t, you don’t have any readers!” I am indebted to Stern and O’Brien (2011) for this reference.

²³ Editor of a commercial subsidiary of a major party paper

²⁴ Hassid (2011) identifies three further types; “workaday journalists”, who “work mainly for money and lack a commitment to public service”; “communist professionals”, who continue to view their task as acting as the “throat and tongue” of the Communist Party; and “American-style professionals”, who share “advocacy professionals” commitment to journalistic independence but lack their commitment to political activism. Numerically, Hassid suggests, “workaday journalists” and “advocacy professionals”

largest and most respected commercial newspapers, the ethos and practice of critical and investigative journalism, often with a strong advocacy component, appears to have become deeply institutionalized in culture and organization over the 2000s (Tong and Sparks 2009, Hassid 2011: p. 831; cf. Bandurski 2013).

3.3.1.2 Qualified State Support: “Public Opinion Supervision”

While social and economic liberalization were crucial to enabling these new forms of journalism, investigative reporting and coverage of negative news have only been possible because – at least until Xi Jinping’s assumption of power – the Party was willing to permit it, at least in general terms, and because the institutional structures and control practices of the propaganda apparatus created a circumscribed space for it, which, through to the end of the Hu-Wen era, the Party was unable or unwilling to eliminate. Indeed, it was the top leadership that took the first steps to encourage this form of journalism, when it asked the state broadcaster CCTV to set up an investigative-news program in the early 1990s (Zhao 2004). The motivation for this step and the subsequent circumscribed tolerance for critical reporting and commentary seems to have been some combination of strengthening oversight over local officials, improving information flows, and increasing the media’s credibility among the general population in order to better manage and monitor public opinion. (Zhao 2004; Stockmann 2013: pp. 87, 140–148; Liebmann 2005; Reilly 2012: pp. 20, 36–37).

Party theory has codified a space for what we would call “watchdog journalism” with the concept of “supervision of the party and government by public opinion”, or “public opinion supervision” for short (舆论监督). The term was first used in 1987 by Zhao Ziyang, and remains a basic principle of CCP theories of media management and governance²⁵, though the Party has always been careful to qualify its endorsements of “public opinion supervision” by simultaneously stressing the media’s obligation to adhere to the principles of Party leadership, correctly guiding public opinion, and being aware of the social impact of public opinion supervision (Cheung 2007: pp. 14–17). As the former managing editor of *Southern Weekend* writes, “For all news stories in China, there is a constant push and pull between the priorities of ‘supervision by public opinion’ and ‘guidance of public opinion’. While one seeks to expose (often for the benefit of Party leaders), the other seeks to minimize social and political fallout for the sake of “stability” and the interest of the Party.” (Qian 2005).

predominate, with the latter clustered especially at the top the outlets. Conversely, “communist” and “American-style” professionals are numerically small or declining groups.

²⁵The Report of every Party Congress since 1987 has endorsed “public opinion supervision”, and the term is widely used in the official professional journals for media workers that convey the “management spirit” of propaganda authorities to the media at large (Qian Gang 2005). Chinese laws and regulations also frequently endorse “public opinion supervision” as a way to facilitate their implementation.

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3.3.1.3 The Propaganda/Censorship System and Its Gaps

Responsibility for fine-tuning these two countervailing principles rests with the propaganda system.²⁶ This is a partially decentralized and somewhat fragmented system. Media outlets are supervised by the propaganda bureau at their bureaucratic and territorial level. Outlets owned by central-state institutions like *China Youth Daily* or the *People's Daily* ("central media") are supervised by the Central Propaganda Department (CPD); outlets owned by provincial or municipal institutions ("local media") are supervised by propaganda bureaus at these levels. The CPD can issue instructions to lower-level propaganda bureaus, but they also have some scope for setting their own priorities. Crucially, propaganda departments that rank below a media outlet or are from a different geographical locale cannot issue binding orders to it. Thus, central media are obliged only to heed directives from the CPD. If city or provincial authorities want to prevent them from publishing something, they must request the CPD to issue appropriate orders. Similarly, media from one geographical locale are obliged only to heed directives from the propaganda authorities of that locale (and higher-level authorities, though these usually work through the local authorities). Thus, if the Shanxi Propaganda Department wishes to stop *Southern Metropolis Daily* from publishing something, it has to ask the Guangdong and/or central Propaganda Departments to issue the orders. Little is known about how propaganda authorities make decisions, but it is clear that the central and the provincial departments will not necessarily comply with each other's requests and can take different positions on the same issue (Interviews 43, 52, 56).²⁷ This fragmentation means that central media enjoy greater freedom to report critically on local authorities than media supervised by provincial or local authorities, and local media from province A enjoy greater freedom to report on events in province B than they do to report on province A (Tong 2007, Wagner-Givens and Repnikova 2011). For example, in 2003 the Beijing city government asked a major central-state newspaper to stop one of its subsidiaries, a Beijing-focused commercial newspaper, from reporting on a large mining accident in suburban Beijing. They ignored the request and covered the accident extensively, because as central media they and their subsidiaries were subject only to the CPD, and this did not issue any instructions. That apparently left the city government fuming, but they were unable to retaliate in any significant way (Interview 51).²⁸

Content control is exercised primarily by issuing ad-hoc instructions on specific topics and incidents as they crop up (e.g. whether and how a riot may be reported), combined with state and party documents setting out more general albeit vaguely formulated norms, and post-hoc punishment of media workers and outlets if propaganda authorities

²⁶This paragraph is based on Liebmann (2005: pp. 41–64), Stockmann (2013: pp. 51–54) and Bandurski (2011a and 2012a)

²⁷Journalists from commercial papers A and B (43, 54), former editor from major party paper (50)

²⁸Editor from a commercial subsidiary of a major party paper

feel a line has been overstepped.²⁹ It is important to stress what there is not: a clear catalogue of banned topics or a press law that would specify more precisely what is permissible and what is not. There is also almost no pre-publication review of what outlets are about to publish.³⁰ Certain topics are obviously completely off-limits (e.g. Tian'anmen) and others are considered so sensitive that they can be touched only with great care.³¹ But during the Hu-Wen years, a wide range of topics was at least partially or even wholly open to investigative reporting and commentary, unless and until specific instructions were issued. These included many economic, environmental, legal, social and, within greater limits, even foreign-policy issues and events, as well as mismanagement or misbehavior by lower-level officials (at the village, township or county level). As a result, much reporting took and continues to take place “in the murky mid-range between uncontroversial and forbidden” (Hassid and Stern 2012: p. 8).

Where the boundaries of the permissible lie varies with the political season, the wider domestic and international political environment, and the outlet. There are no fixed rules. “A story praised yesterday or last week might merit disapproval next time it is published.” (Hassid and Stern 2012: p. 7). The state routinely tightens controls temporarily around major political and societal dates like the meetings of the National People’s Congress, Party Plenums, and national holidays (Stockmann 2013: p. 146). When the political environment becomes tense (e.g. because a handover of power looms or a series of crises have stressed the system) tightening may last longer – for months or years. Conversely, government failure can also lead to opening: thus the botched cover-up of the SARS crisis is generally held to have inaugurated a period of relaxation of media controls. While dating the precise onset of such “opening and closing” (*fāng/shou*) cycles (Baum 1996) is an inexact art, Chinese scholars and media workers and Western analysts commonly argue that the early to mid-2000s witnessed an opening period in the aftermath of SARS, followed by a tightening from about 2008 on, as the Olympics, the very acrimonious 2012 leadership transition and the intensification of social conflicts came together (Wang 2011, Sun 2013, CYD 2012; Interviews 43, 50, 52³²). Since 2013, the Xi administration has further tightened controls, to an extent unseen since the post-1989 crackdown (Bandurski 2015). However, that took place after the events that this thesis deals with had already happened.

²⁹This paragraph is based on Hassid (2008), Hassid and Stern (2012), Liebmann (2005: pp. 41–64), Stern and O’Brien (2011) and Stockmann (2013: pp. 77–86).

³⁰In 2008, pre-publication censors were installed at *Southern Weekend*, but this was a highly unusual move and seems not to have been copied at other outlets. (Bandurski 2013)

³¹In particular, interviewees repeatedly mentioned religious and ethnic conflicts as well as “mass incidents” (群体性事件; i.e., protests, riots and mass petitions) as especially sensitive topics that had to be handled extremely carefully – if at all. Interviews 43, 52 (investigative journalist from commercial paper A, former chief editor of major commercial newspaper C)

³²Investigative journalist from commercial paper A (43), former editor from major party paper (50), former chief editor of major commercial newspaper C (52).

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Different outlets are controlled with different levels of intensity. Because they attract very large readerships, web portals seem to be monitored more closely than newspapers. They frequently receive instructions to delete articles or move them to less prominent locations on their websites that the newspaper, which originally produced the article, can print and maintain online on its website without problem (Distelhorst 2013: pp. 49–51). For example, on 19 December 2006, Sina and other web portals were instructed to delete their reprints of an article about a mining accident in Henan.³³ The portals complied, but the article is still available on the website of the newspaper that originally published it, and can be easily found online via the Baidu search engine.³⁴ Evidently the paper had not overstepped a line in publishing it (otherwise the article would have been deleted from its website and Baidu instructed to block searches), but propaganda authorities apparently wanted to limit its circulation. Why is not obvious, as the article and the events chronicled were in no way unusual, nor its content and language especially emotional or otherwise inflammatory.³⁵

The result of these censorship practices is a deeply opaque system: What is and is not acceptable is nowhere set down, can change abruptly in response to political or societal events, and can also vary with the unit and level of the propaganda system that supervises an outlet. Scholars continue to debate whether this is a deliberate strategy to encourage self-censorship and maximize options for the state, or whether it simply reflects the complexity and fragmentation of the Chinese state and the influence of a “guerrilla policy style” (Heilmann and Perry 2011) that understands governing as a process of continual improvisation and adjustment and accepts pervasive uncertainty (Hassid 2008, Hassid and Stern 2012, Stern and O’Brien 2011).

However, this ambiguity also provides space for pushing boundaries, a practice known as “playing edge-ball” (打擦边球) after the ping-pong technique of hitting the ball right on the edge of the table without going out. While penalties for seriously overstepping the line can be severe, the incentives to hit successful “edge-balls” are also substantial, and many senior media workers are very skilled at playing these games (Distelhorst

³³The leaked instruction can be viewed at the *China Digital Times* website (<http://chinadigitaltimes.net/2012/12/censorship-vault-beijing-internet-instructions-series-34/>)

³⁴The article in question (“Investigation into the Unsettled Case of the 23 July Mining Disaster in Mianchi” [渑池 7·23 矿难疑案调查]) was published on 29 November 2006 in the *China Economic Times* (中国经济时报), a paper owned by the State Council Development Research Center, and remains available on its website (http://jjsb.cet.com.cn/show_76809.html). A Baidu search for the article title returns the article as the first hit (Searched 18 March 2015).

³⁵The article concerned a small accident (7 fatalities) at an illegal mine that seems to have been hushed up by village and county authorities. While illegal mining and cover-ups of accidents were by 2006 treated extremely seriously by higher-level authorities – and were therefore very sensitive for local officials and mine owners – they could in no sense be considered a politically sensitive topic, something emphasized also by interviewed media workers (Interview 51, editor from a commercial subsidiary of a major party paper; Interview 47, editor from commercial paper C; Interviews 43 and 54, journalists from commercial papers A and B). Many articles were published revealing or discussing cases like this one.

2013: pp. 31–55; Reilly 2012: pp. 33–34; Tong 2007, 2009; Shambaugh 2007: p. 57f.; Stockmann 2013: pp. 133–139). As will be discussed further in Section 3.5, in the 2000s the state repeatedly sought to tighten control over the media and watchdog journalism, without though fully closing the space for independent and critical work that had opened up.

3.3.2 Covering Mining Accidents

Against this background, the growth in coverage of mining accidents becomes intelligible. The key question is, did this coverage reflect a coordinated effort by the state to increase reporting to put pressure on local authorities, or was it the product of independent activity by journalists and outlets hunting for stories? The opacity of the Chinese state means that it is hard to answer this question definitively. As James Reilly has observed with regard to nationalist and anti-Japanese reporting in the Chinese media, “much of the civil activism, popular media, and public intellectuals in China occupy an opaque grey area between state and society.” (2012: p. 19; cf. Ho 2007). Even for insiders, it can be very difficult to tell what is driving what.³⁶

With regard to the surge in coverage of mining accidents, the most likely answer from the materials available to me lies between the two extremes of state direction versus entirely independent journalistic activity. As documented in this section, there is little evidence that the state systematically instigated and coordinated coverage of mining accidents, and this idea misconstrues how China’s media management and control mechanisms seem to work. Journalists (and other civil activists) act independently and for their own reasons, but they do so in light of the evolving political opportunity structure, trying to keep their actions (just) within the bounds of the politically permissible. The media had good reasons of their own for covering mining accidents (selling copy, fulfilling an “advocacy” ethos). But accidents and other problems in coal mining also fitted the format for topics where it was usually permissible to conduct watchdog reporting (“public opinion supervision”) rather well. State leaders and policy documents frequently affirmed the general legitimacy of conducting public opinion supervision with regard to mining accidents. It served them as a tool to clamp down on misbehavior by mine owners and local officials. Yet these were not blanket endorsements of unrestricted coverage of accidents: as we will see, propaganda authorities repeatedly banned or restricted reporting, and officials warned the media against “excessively” negative and sensationalistic reporting on accidents, as they feared that this could damage social stability. There are tentative indications that restrictions on reporting mining accidents tightened around 2010/2011, as the political environment grew more tense towards the end of the decade.

³⁶It is striking that a Chinese legal scholar used almost the identical words as Reilly when discussing this issue with Daniela Stockmann, noting that “in China, many phenomena are deeply opaque.” (在中国好多事情很模糊) (Stockmann 2013: p. 146).

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These contradictory impulses should *not* be read as evidence for a struggle between different bureaucracies or factions, with some seeking to increase and others to reduce coverage: in some cases, the same bureaucracy near-simultaneously publicly praised “public opinion supervision”-style reporting on mining accidents, while – less publicly – issuing bans or reprimands to the media over such reporting. Strikingly, officials from the State Agency for Work Safety (i.e. the agency one might most expect to want to stimulate accident coverage) repeatedly expressed concern over the media “sensationalizing” (炒作) accidents. Rather, they are evidence for the acuteness of Qian Gang’s observation about the continuous tug of war in the state’s media management between the competing priorities of “public opinion supervision” and “guiding public opinion” to maintain “stability”. In the case of mining accidents what this tension fundamentally came down to, was that the state wanted to use the media’s watchdog function but remained very wary of the potential for sensationalist accident coverage to whip up “public emotions” (舆情), which it considered a threat to “social” (that is, regime) stability.

I next document these claims.

3.3.2.1 State Order or conventional Public Opinion Supervision?

Interviewed editors and journalists consistently attributed the steep rise in media coverage of accidents in the 2000s to the flourishing of the commercial media after c. 2000 and the dramatic rise in coal prices (and coal-boss fortunes), which drew additional attention to the sector. They believed that the primary reason why accidents were little-covered in the 1990s was that the commercial media, which drove forward investigative reporting of negative news, only began to develop from the late 1990s on (Interviews 43, 51, 52, 54, 70).³⁷ While a former employee of the US Embassy in Beijing claimed to have heard that a state command to increase accident coverage was issued to the media in the late 1990s,³⁸ no interviewed media worker had heard of this or related the jump in coverage to such an order.³⁹

³⁷ Journalists from commercial papers A, B and D (43, 54, 70); editor from a commercial subsidiary of a major party paper (51); former chief editor of major commercial newspaper C (52)

³⁸ Personal communication, 3 April 2014, Chicago.

³⁹ Interviewees included one former chief editor, a current editor and one former and three current senior journalists from two commercial newspapers and two magazines well-known for investigative reporting; one former editor from one of the most authoritative state newspapers; one current editor of a commercial subsidiary of this paper; and one individual from the *People's Daily* who in 2003/2004 was for about 10 months responsible for receiving and distributing CPD instructions to journalists at the *People's Daily* and its subsidiaries. As Figure 3.1 above shows, accident coverage in the *People's Daily* jumped markedly in 2003 and 2004, with almost twice as many articles published in 2003 and 2004 as in 2001 and 2002. Had the spike in coverage primarily been the result of state instruction, this person would very likely have heard of it. Would these people have told me of such an instruction? Propaganda department instructions apparently circulate quite freely within newsrooms, but leaking them is a serious offense. In five cases I am very confident that they would have, because they either

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However, trying to relate the surge in coverage to a specific state order misunderstands how China's media system seems to operate. As discussed, by the 2000s a circumscribed but real space for investigative journalism and "negative news" reporting had come about and been legitimized by the Party. While the size of this space has fluctuated, as a rule of thumb, "public opinion supervision" is more likely to be deemed permissible if the targets are village or county officials or private companies acting in ways that run counter to the declared aims and policies of the Center (Stockmann 2013: pp. 139–140, Zhao and Sun 2007). Mining accidents fitted this prescription quite well: while unambiguously scandalous (newsworthy) events, their primary cause lay with the behavior of private mine owners and subprovincial officials. They did not directly implicate the central government. On the contrary, since the Center had consistently made clear that it wanted the small-mine sector (where accidents and private ownership were concentrated) to be eliminated, media coverage of accidents and other undesirable side-effects of unchecked mining actively supported central-state policy, and gave the Center an opportunity to portray itself as the protector of the weak.⁴⁰

These rules of thumb are well-understood by Chinese media workers. State documents and leaders' remarks moreover consistently affirmed the legitimacy of conducting "public-opinion supervision" on mining accidents. For example, the 2002 *Work Safety Law* noted that "news, publishing, broadcasting, film, and television work units . . . have the right to conduct public opinion supervision with regard to behavior that violates work-safety laws and regulations." (State Council 2002). In 2005, the Secretary of the State Council Work Safety Committee, Politburo Standing Committee Member Huang Ju, called for "creating mechanisms for public opinion supervision and supervision by the masses" (舆论监督、群众监督机制) and "exposing model cases where neglect of work-safety caused major accidents" (SAWS 2005). This was repeated verbatim by Wen Jiabao in 2006 (Wang 2007). Most state documents on work safety and structural adjustment in coal mining contained at least a half-sentence calling for public opinion supervision and exposure of safety violations. More effusively, in April 2007 the head of the State Agency for Work Safety (SAWS), Li Yizhong (李毅中), told the *People's Daily* that "we [SAWS] welcome and thank society and the media for carrying out supervision, especially with regard to accident cover-ups" (PD 2007). And in February 2011, the Party Secretary of Henan, Lu Zhangong, praised public-opinion supervision as really a form of "positive reporting" (正面报道)⁴¹: public-opinion supervision report-

revealed information about other, arguably more sensitive, propaganda-department instructions or because of the closeness of the personal relationship. Two dwell outside of China today. While not everyone will hear everything, most of these interviewees were sufficiently senior and well-placed that they probably would have heard of such an instruction, at least as a rumour, if this had been crucial to stimulating the coverage.

⁴⁰On a more abstract level, though, the regular occurrence of major accidents, corruption and "bloodstained GDP" did implicate the Center, in the sense that it showed up the gulf between the Hu-Wen administration's "harmonious society" agenda, and reality. This helps explain why the Center remained wary of "excessively" negative coverage of accidents.

⁴¹Chinese state authorities conventionally classify investigative journalism/public opinion supervision as "negative reporting" (it reports negative news). "Positive reporting" ordinarily refers to con-

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ing on disasters in Henan like the 2010 Mianchi mining accident had had nationwide impacts and propelled local rectification and reform (整改), he claimed (*CYD* 2011b). The state also took positive actions to facilitate public-opinion supervision. In 2005 it mandated that “shutdown lists” (黑名单) of all coal mines scheduled for closure had to be published, so that the public and the media could check on and report illegal operations.

This legislative language and these statements must not be misinterpreted. They were not positive *commands* to increase coverage. By themselves, the references to public opinion supervision were unremarkable: Since the late 1980s, at least 10,000 laws and regulations (法律法规) have been published that included some form of endorsement of “public opinion supervision”, in everything from food safety to the commercial use of low-altitude air space.⁴² Although policy documents and speeches about mining safety regularly mentioned public opinion supervision, they rarely emphasized it. Mostly, the reference to public opinion supervision was embedded within a longer paragraph on media work, whose overall emphasis was usually not on undertaking public opinion supervision, but on carrying out education and propaganda about mining safety and mining safety laws – and often emphasized the need for correctly guiding public opinion (正确的舆论导向).⁴³

In other words, this language did not negate propaganda controls. While interviewees felt that overall relatively few restrictions were issued regarding the coverage of mining accidents – something supported also by anecdotal information reported by the HKU China Media Project (Bandurski 2006a) and the content of leaked propaganda instructions⁴⁴ – and none knew of an outlet or a journalist getting into serious trouble over accident coverage in the 2000s,⁴⁵ a certain volume of restrictions was issued. For

vventional propaganda designed to make the party, a leader or some state initiative look good. The Party Secretary is inverting the terms.

⁴²A full-text search of the WestLaw database for the term “public opinion supervision” (舆论监督) in the category “laws and regulations” returns exactly 10,000 hits. It can be assumed that these are virtually all positive endorsements of the practice.

⁴³Huang Ju and Wen Jiabao’s statements are exemplary in this regard. Wen’s full statement reads: “Fully bring into play the functions of the news media, insist on correct guidance of public opinion, energetically publicize work-safety policies, laws and regulations, and promulgate advanced models [of work-safety practice] and experiences. Model cases where neglect of work-safety caused major accidents should be exposed. Educational activities to spread knowledge about safety science should be widely launched, the construction of safety culture and popular safety consciousness strengthened, and an excellent popular opinion environment created in which people ‘love life and pay attention to safety.’” (quoted in Wang 2007). Huang Ju’s statement is near-identical.

⁴⁴*China Digital Times* has collected 790 separate instructions issued by central and local propaganda authorities from 2005 to 2015 that have been leaked by news workers. Only 20 concern production (work-safety) accidents (生产安全事故), of which 18 concern specific mining accidents. To what extent they constitute a truly random sample is unclear, but they probably provide a basic sense of what the propaganda system’s main concerns are.

⁴⁵One interviewee stated that in the late 1990s his paper had been rebuked by a CPD Critical Reading Group for reporting on an accident in what the Reading Group viewed as an excessively gory

example, five months after Party Secretary Lu's praise for watchdog journalism, his propaganda department banned Henan's media from all reporting on "safety problems and related issues in Henan's mining industry" for as long as a work-safety education and propaganda initiative was taking place.⁴⁶ Similarly, just a few weeks before SAWS boss Li Yizhong "welcomed" watchdog journalism, Wang Zhengmin, a senior official from Li's own bureaucracy, published an essay warning journalists against "negative", "one-sided" and sensationalistic reporting about mining accidents. They were to "correctly guide public opinion" by emphasizing positive information about the improving safety situation and "dissolve the extreme emotions" that mining accidents could trigger in readers. Journalists' task was to "help out, not create trouble" (多帮忙, 不添乱) (Wang 2007). We will return to this essay in Section 3.5, where coverage restrictions will be further discussed. This was not the first time SAWS had voiced concern over media coverage. Already in 2001 the then-deputy head of the SAWS Policy and Law Bureau (政策法规司) warned against the media "sensationalizing" (炒作) accidents, "lest this cause people to lose faith in [the ability of enterprises and the state] to ensure work safety (反而容易丧失人们对搞好安全生产的信心) (Huang 2001). It is worth noting that this official subsequently served as SAWS press spokesman throughout most of the 2000s.

This is also not to say that these pronouncement were completely meaningless. Together with the Center's numerous other symbolic and administrative acts in the 2000s concerned with improving mining safety,⁴⁷ these pronouncements served as signals that the Center was concerned over mining accidents and general chaos in the coal sector, thus affirming that these were broadly "open" topics where investigative reporting was generally permissible (though ad-hoc restrictions might be issued). As one editor noted, ultimately the state found such coverage useful (Interview 51). At the same time, the state was concerned that investigative journalism and outspoken commentary not lead to an excessively negative public-opinion environment and that individual accidents

and negative way, but none knew of anything comparable in the 2000s. (Critical Reading Groups are groups of retired cadres who review and critique material after publication. Little is known about them, including whether they still exist.) Indeed, another editor felt that the biggest danger when covering accidents was not running afoul of the propaganda authorities, but the mine owners, who often had Mafia connections. Journalists who did not take hush money could be beaten up or worse. (Several such cases have been documented. The most extreme concerned the murder of a fake journalist [i.e., someone trying to extort bribes by threatening to report accidents] but journalists from the *People's Daily* and Xinhua, too, were attacked on occasion. See for example CYD 2003a).

⁴⁶The leaked instructions can be viewed at China Digital Times, <http://chinadigitaltimes.net/2011/07/directives-from-the-ministry-of-truth-june-6-29/>

⁴⁷These included creating a dedicated State Agency for Work Safety (in 2000) and progressively upgrading its bureaucratic in 2003 and 2005, ultimately to ministerial status; establishing a State Council Committee on Work Safety chaired by a Politburo Standing Committee Member in 2001; passage of the *Work Safety Law* and a large battery of work-safety related administrative regulations; as well as symbolic actions like Wen Jiabao's New Year's visit to families of miners who died in the 2004 Tongchuan accident.

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not become focal points around which public anger might coagulate around, thereby damaging “social stability”.

The above-mentioned 2006 instruction to web portals to delete their reprints of a *China Economic Times* article investigating a Henan mining accident illustrates this back-and-forth dynamic: by itself, the article apparently overstepped no boundary – indeed, by revealing the cover-up of an accident at a mine that, according to the official “shutdown list” ought to have been closed down, the newspaper was carrying out precisely the kind of “supervision” that the above statements called for, using the resources the state had provided to actively support this coverage (the shutdown list). Yet propaganda officials ultimately ordered web portals to take the article down - but did *not* order the newspaper to remove it from its own website and archives. Their concern, it appears, was to limit the article’s circulation and thus its potential impact on social stability, not to ban watchdog journalism.

Importantly, given the news value of accidents, the media’s incentives for testing out the permissible boundaries, and a political culture in which rules and boundaries are rarely spelt out precisely, there should have been no *need* for the state to issue an explicit command in order for it to get the media to conduct watchdog journalism on mining accidents. As Daniela Stockmann argues, in cases like these, where market (readership) demand coincides with central-state policy interests, the media will readily supply the coverage the state finds useful, without the state having to command it (Stockmann 2013: p. 111). Since the limits of the permissible are marked out primarily by issuing specific restrictions and post-hoc criticisms, when the state refrains from issuing substantial volumes of restrictions – as appears to have been the case with mining accidents – this will be noted and read as an (implicit) permission, prompting further coverage (Reilly 2012: p. 44).

State and media actions and interests thus combined to put mining accidents on the political and media agenda in the 2000s, in a way that they had not been in the 1990s. Seeking to establish whether the state or the media was the first mover in this process is very difficult. Probably, there were reciprocal feedback loops at work here: As two editors separately argued, the media would focus on issues the Center gave prominence to, but the Center also focused its political energies on issues that the media gave prominence to, thereby legitimizing and encouraging coverage (Interviews 47, 52).

The larger point is that by the early 2000s, China’s media landscape had evolved to the point where public communication flows were no longer exclusively controlled and directed by the state (though it retained great influence over them, and was extremely concerned about this evolution). While fuzzy, a space had come about for the media to take independent action. The spread of advanced communications technology and the general pluralization of society contributed to this: as one editor noted, while in the past it had been possible to block news of major disasters relatively comprehensively, today such events could not simply be covered up (Interview 51). The migration of news and

communication flows online meant that these could now spread very rapidly. As will be explained further in Section 3.5, the state considered this to have serious implications for social and political stability: it was concerned over the potential for accidents and other emotive, highly publicized “sudden incidents” to become focal points for public anger. More important than trying to establish what exactly caused a topic capable of stirring strong public interest and emotions to get on the agenda are therefore the dynamics and pressures unleashed by it having become a public topic (irrespective of what exactly made it that). Before I address that further, however, there is still the question of why Shanxi and Henan received so much more coverage than other provinces.

3.4 Variation in Provincial Accident Profiles and Media Coverage

Media workers stressed two factors when explaining how their newspapers decided whether and in what detail to report on a mining accident: its size (number of fatalities) and whether there were “special factors” (特点) that gave it added “impact” (影响力). Regarding size, journalists noted that there were no strict cut-off points, but repeatedly mentioned 25 to 30 fatalities as a minimum below which an accident was unlikely to get much media attention, unless there were special factors (Interviews 43, 47, 51, 54, 58, 70).⁴⁸ These included anything that gave it additional news value, such as suspected cover-ups (瞒报) by the owner or local officials, ongoing rescue efforts of trapped miners, other special personal angles or curiosities, the state of the mine (whether it was especially modern, making the accident surprising, or particularly primitive, making it especially shocking), indications that local corruption may have played a role in the accident, or whether the firm was listed (i.e., whether stock prices might be influenced) (Interviews 43, 47, 51, 54).⁴⁹

This explains why the media focused so heavily on Shanxi and Henan. As Figures 3.11 and 3.12 show, both the cumulative and the annual blood toll from coal mining in the two provinces was relatively high, but by no means the highest among the case-study provinces – a cumulative 5052 deaths in coal-mining accidents in Shanxi and 2860 in Henan between 1999 and 2011, versus 1407 and 1914 in Inner Mongolia and Shaanxi, and 8508 in Guizhou. Crucially, both provinces suffered large numbers of big accidents. Between 1999 and 2011 Shanxi suffered 48 coal mining accidents with 20 or more fatalities, of which 23 involved 30 or more deaths, and 6 more than 50 deaths. Shanxi also suffered three massive accidents in gold and iron ore mines, with 46, 45

⁴⁸ Journalists from commercial papers A, B and D (43, 54, 70), editor from commercial paper C (47), editor from a commercial subsidiary of a major party paper (51), journalist at commercial subsidiary of a provincial party paper (58)

⁴⁹ Journalists from commercial paper A and B (43, 54), editor from commercial paper C (47), editor from a commercial subsidiary of a major party paper (51)

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and 281 fatalities respectively.⁵⁰ In Henan there were 21 coal-mining accidents with 20 or more deaths, of which 12 saw 30 or more deaths and four more than 50 deaths. Conversely, in Guizhou there were only four accidents with more than 30 fatalities and only one with more than 50.⁵¹ In Shaanxi and Inner Mongolia there were even fewer large accidents (Figure 3.13).

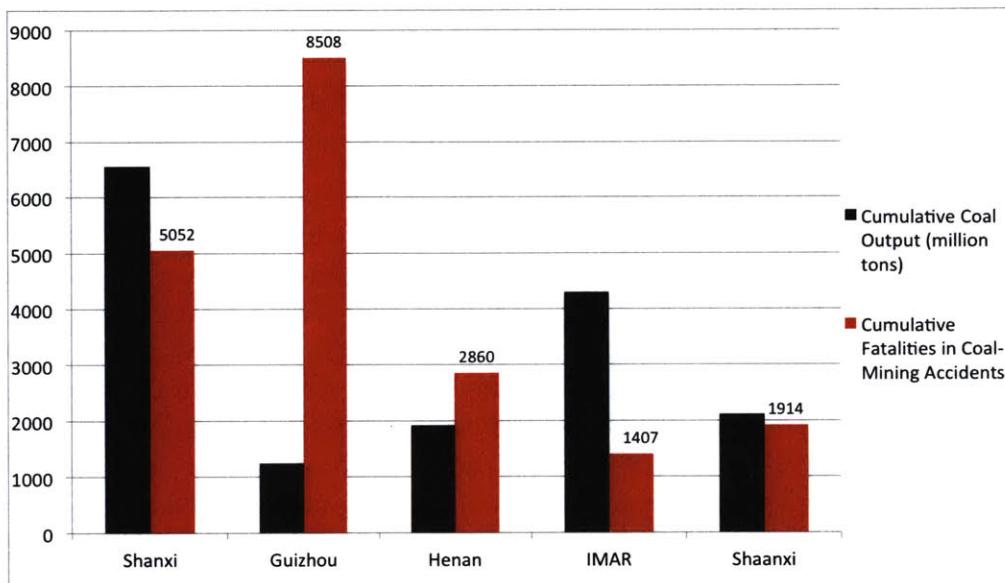


Figure 3.11: Cumulative Deaths in Coal-Mining Accidents in the Case-Study Provinces, 1999 - 2011

Sources: CCIYB 1998-2012, Safehoo.com

This does not mean that the mines in these provinces were necessarily safer than those in Shanxi and Henan - on the contrary. Figure 3.14 shows the how many workers

⁵⁰Guizhou, Inner Mongolia and Henan, too, suffered several accidents in non-coal mines, but apart from one accident in an iron ore mine in Inner Mongolia (29 deaths, in 2007) these all involved fewer than 20 fatalities.

⁵¹Timing matters as well. Of Guizhou's four accidents with more than 30 deaths, two occurred in 1999 and 2000, respectively – effectively before the age of internet-enabled commercial media had really begun in China. Conversely, of Henan's “30+” accidents, 11 (85%) happened between 2004 to 2010. Shanxi too suffered at least one and often multiple “30+” mining disasters in *every* year from 2000 to 2010.

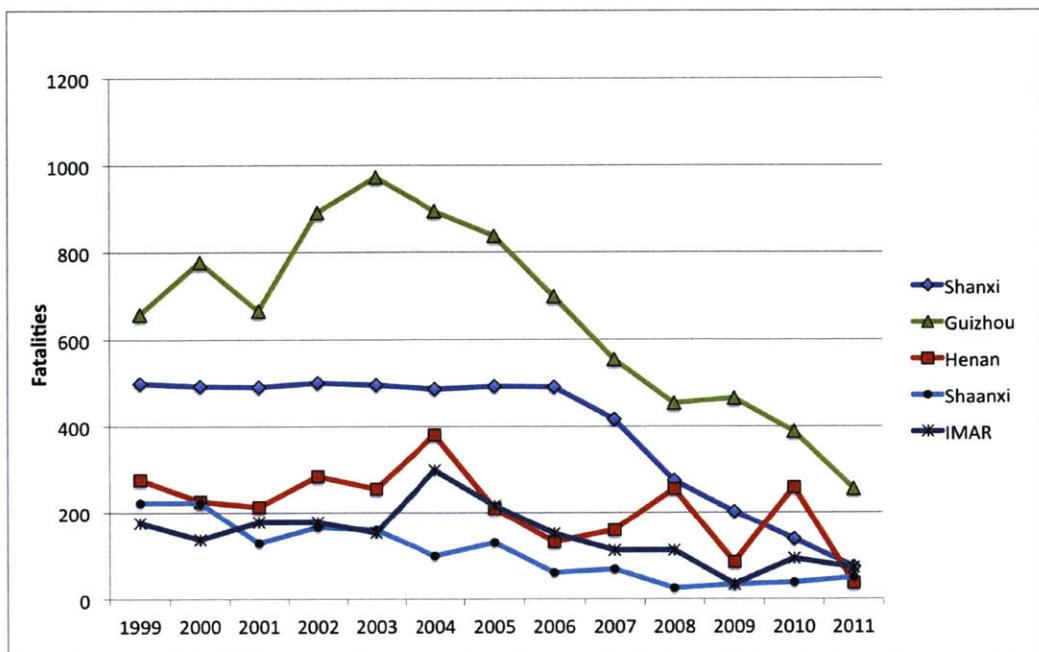


Figure 3.12: Annual Deaths in Coal-Mining Accidents in the Case-Study Provinces

Sources: CCIYB 1998-2012, Safehoo.com

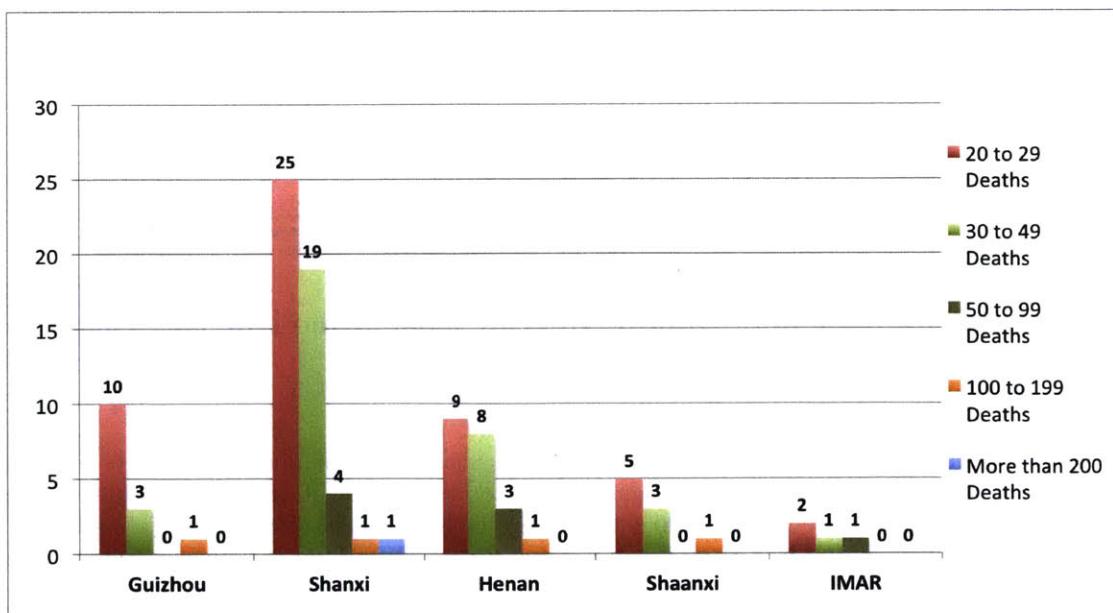


Figure 3.13: Accident Profiles of the Case-Study Provinces

Sources: CCIYB 1999-2011, Safehoo.com, own data compiled from media reports

died annually per million tons of coal mined in each of the case-study provinces and nationally between 1999 and 2011. This is the most commonly used safety statistic in China. As we can see, statistically, Shanxi's mines were substantially safer than the national average, as were Henan's. The great number of very large accidents in the two provinces seems to have been primarily a consequence of their very large coal industries (cf. Figure 3.11), the relatively large size of their mines and – compared to Inner Mongolia and Shaanxi – their less advantageous geologies, with most mining taking place underground rather than in opencast mines.⁵² Conversely, Guizhou's coal industry was, statistically, the most dangerous nationally and had the highest total number of fatalities⁵³, but as its mines were mostly small, accidents were so too, and these attracted little media attention.

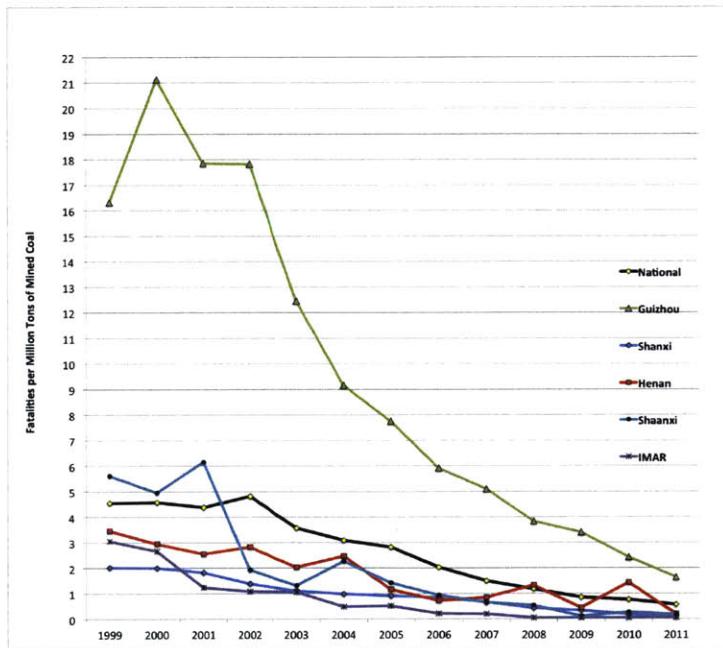


Figure 3.14: Fatalities per Million Tons of Coal Mined in the Case-Study Provinces and Nationally
CCIYB 1998-2012, ECIDC 2010, Safehoo.com

⁵²Most coal mining in Inner Mongolia and northern Shaanxi is open-cast mining. The mines in central and southern Shaanxi are underground mines too (and most of Shaanxi's accidents seem to have taken place here) but by the mid-2000s these were largely exhausted and being abandoned.

⁵³Guizhou's very poor accident record was a consequence of geology (small coal fields, high gas content, complex seams and abundant water, making flooding more likely), poverty (Guizhou is China's poorest province) and policy decisions taken in the 1980s and 1990s, namely to encourage micro-scale mining by peasants in the off-season, to reduce poverty. The rapid drop in fatalities after 2005 seems to have been a result of aggressive closures of micro-scale mines at that point.

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Media workers noted several additional factors that help explain why coverage focused so heavily on Shanxi, and so little on Guizhou, despite its much higher total accident toll: Shanxi, and Henan, are relatively close to Beijing (where most media outlets retain large offices), their communications infrastructure is well-developed, and their mining areas can usually be reached cheaply and quickly by train or car from Beijing. Guizhou, Inner Mongolia and Shaanxi are much further away from the major urban centers where media outlets retain offices, and within these provinces the mining areas are mostly in remote areas with poorly developed transport connections. Moreover, interviewees felt that especially in Guizhou the local media, whom they often relied on for initial pointers, were relatively underdeveloped compared to Shanxi and Henan. These factors meant that it was harder for the kind of detail that gave an accident additional news value to leak out, and it was more expensive to send journalists there to conduct investigations that could ferret out such information (Interviews 43, 47, 51, 52, 54, 58).⁵⁴ As one editor noted, if you wanted to write about mining accidents, you could just as well go to Shanxi or Henan: the issues, to her mind, were the same as in Guizhou, and it would be easier and cheaper to cover (Interview 51).

Perceptions about the relative wealth of coal bosses and the coal sector may also have played a role. One journalist felt that because the wealth that bosses and local officials in Shanxi had accumulated from coal was so great, this gave stories about accidents there a “moral angle” (道德角度) and meant they could be used to discuss larger issues: the price China was paying for development (“bloodstained GDP”), and the (supposed) collapse of moral standards in society. Because far less wealth had been accumulated in Guizhou, accidents there had lower news value: poor peasants dying in each other’s mines was tragic, but unremarkable (Interview 43).⁵⁵

Conversely, there is little indication that political factors, such as the intervention of censorship authorities were important for explaining the media’s focus on Shanxi and Henan, and the relative lack of attention given to Guizhou. One journalist thought that reporters might be somewhat more wary of reporting on events in Guizhou because of the presence of large numbers of ethnic minorities in the region, as that could complicate stories politically in unforeseen ways. But others disputed the relevance of this (Interviews 43, 56, 53).⁵⁶ Interviewees were not aware of any order to report less on Guizhou than on Shanxi, and indeed thought this idea strange. As one interviewee who had had deep exposure to the censorship system noted, censorship instructions usually take the form of orders how (and whether) a specific event (e.g. a particular accident) was to be covered, or how (whether) particular categories of events (e.g. production

⁵⁴ Journalists from commercial papers A and B (43, 54), editor from commercial paper C (47), editor from a commercial subsidiary of a major party paper (51), former chief editor of major commercial newspaper C (52), journalist at commercial subsidiary of a provincial Guizhou party paper (58)

⁵⁵ As this interviewee pointed out, poorer bosses also had another consequence: accidents attracted fewer real and fake journalists seeking to extort bribes.

⁵⁶ Journalist from commercial paper A (43), editor from a commercial subsidiary of a major party paper (51), former chief editor of major commercial newspaper C (52)

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accidents in general) were to be covered during a particular time-period (e.g. National Holiday or the sitting of the People’s Congress): they did not take the form of blanket orders how a particular province was to be covered. This claim is supported by the 790 censorship instructions that have been leaked and collected by *China Digital Times*. They were issued by national and local propaganda authorities from 2005 to 2015, and almost all concern how a specific event could be reported by the news media and web portals.

Of these 790 censorship instructions, 18 are instructions issued by central propaganda authorities to restrict reporting on 12 different mining accidents. While the small sample size and uncertainty over possible collection biases prohibits drawing strong conclusions from them, they do *fail* to provide evidence that the media’s focus on Shanxi and Henan and neglect of Guizhou was a result of state orders instructing the media to focus on Shanxi/Henan and neglect Guizhou. On the contrary, of the 12 accidents where known censorship instructions were issued, 4 (33%) happened in Shanxi (six censorship instructions) and 3 (25%) in Henan (three instructions) while only 1 accident (8%) was in Guizhou (two instructions). The others were in Shandong (1 accident, three instructions), and Hebei, Liaoning and Tibet (1 accident and one instruction each) (cf. Table 3.4).

Province	Shanxi	Henan	Shandong	Guizhou	Hebei	Liaoning	Tibet
Mining Accidents	4	3	1	1	1	1	1
Censorship Orders	6	3	3	2	1	1	1

Table 3.4: Known National-Level Censorship Orders about Mining Accidents in Different Provinces

As discussed in the next section, the thing that seems to have concerned state authorities most with accidents, was the potential for coverage to stir powerful public emotions, thereby imperiling “social stability”. This was most likely to happen when media outlets covered a particularly shocking accident extensively and in detail. For the reasons discussed above, such coverage was most likely to happen with accidents in Shanxi and Henan or other provinces close to Beijing where large numbers of journalists could easily congregate. The pattern revealed in the leaked censorship instructions is consistent with this: of the 18 instructions, 14 (77%) concern accidents in the five provinces that surround Beijing: Shanxi, Henan, Hebei, Liaoning and Shandong.

3.5 Accident Coverage and Social Stability

Above I claimed that state authorities were concerned about the potential for sensationalist reporting of accidents to threaten “social stability”. This section explains and provides evidence for this claim (Section 3.5.1), and discusses how the state responded (Section 3.5.2).

3.5.1 Social Stability and Mediatized “Sudden Incidents”

Mass social and political unrest is one of the greatest fears of Chinese state elites. Preventing this is conceptualized as “maintaining social stability” (维护社会稳定). This includes preventing and controlling physical collective action like protests, riots and mass petitioning, but also extends to preventing the build-up of strong negative public emotion, especially negative emotion that is focused on a specific political or social event that could serve as a trigger for more physical forms of collective action. It is important to stress the intensity of this concern on the part of state elites. As of the late 2000s, somewhere between 90,000 and 180,000 “mass incidents” (protests, riots, group petitions, physical conflicts, etc.) were taking place in China every year.⁵⁷ While some scholars argue that the state’s relative tolerance of and selective responsiveness to protests that do not openly challenge the CCP’s rule has stabilized the regime (e.g. Chen 2014), the size of the state’s spending on the domestic security services – US\$ 125 billion in 2013; more than on the armed forces (AFP 2013) – indicates the depth of the unease with which Chinese elites regard this state of perpetual “contained contention” (Reilly 2012). The sense of threat and simmering potential for a social explosion is well-captured in a Chinese professor’s remark that “China is like a pressure cooker” (quoted in Reilly 2012: p. 35).

Much remains unclear about how the Chinese state understands and approaches “stability maintenance”. However, it appears that one issue the regime is particularly concerned about is the eruption of so-called “sudden incidents”, inflammatory cases of injustice or wrongdoing that have the potential to spread rapidly through China’s media and internet and spark widespread public anger – especially among the most mobilized and engaged sections of society. This concern makes sense in an environment of commercialized 24-hour media and high internet penetration where censorship is mainly post-hoc and negative events like big disasters, emotive diplomatic crises or large protests can no longer be hushed up the way they could in Mao’s time. As James Reilly notes, “the line between [media and online] debates and mass protests in China is extremely thin.” From the mass movements of the 1920s to contemporary instances of mobilization over nationalist grievances, pollution/health fears or local abuses, China’s

⁵⁷The last official figures were published in 2006, reporting 87,000 “mass incidents” in 2005. In 2010 and 2011 Chinese experts spoke of 90,000 or even up to 180,000 incidents taking place a year, with the number of “large-scale mass riots” in particular growing (Sun 2011, Garnaut 2010).

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modern history is studded with instances where a single inflammatory “sudden incident”, a controversial essay or sensationalist media story, spread rapidly through traditional and now online media, stimulating debates and sparking mass activism, protests and riots (Reilly 2012: pp. 34–38). Consistent with this (hypothesized) concern about how “sudden incidents” may spark mass opinion movements that could lead to mass movements on the streets, statistical analysis of how China censors postings in online social-media fora indicates that the state is above all focused on censoring expression that could spur social mobilization, while tolerating even vitriolic criticism of the state, provided it remains individualized and not part of a larger burst of mass opinion mobilization (King et al. 2013).

Writing about popular nationalist mobilization, James Reilly (2012), Peter Hayes Gries (2004, 2005) and Gries et al. (2016) argue that because the CCP has made nationalism one of the main sources of its claim to legitimacy, it is particularly sensitive to outpourings of opinion and debate in the media and online that question its patriotic commitment and regards these as a particularly serious threat to regime stability. The role of nationalism in the party-state’s legitimating narrative means that popular anger about the machinations of hostile foreign countries is always liable to turn against the regime itself, if it comes to be accused of failing in its own professed duties.

Much the same applies to coal-mining accidents. As Vivienne Shue observes, beside nationalism, a further central element of the Chinese state’s legitimating narrative is the claim to be providing good governance suffused with benevolence and moral virtue – “taking responsibility for the welfare of the people and showing . . . compassionate care for them” (2004: p. 31). Arguably, this was particularly so under Hu Jintao and Wen Jiabao. They built their own personal claim to legitimate power squarely around these themes, by claiming to be building a “harmonious society” (和谐社会) that “placed people at the core” (以人为本). Hu’s signature contribution to the canon of CCP theory – the “scientific concept of development” (科学发展观) – was intended to distance his rule from Jiang Zemin’s (supposedly) socially and environmentally destructive obsession with growth at all costs (Fewsmith 2008: pp. 231–254). Improving work-safety and “stopping major accidents” were made an explicit part of the “Harmonious Society” agenda, and Xinhua even published an explanatory essay discussing the role of work-safety in the Party’s Harmonious Society Decision (CCP Central Committee 2006; Xinhua 2006).

This context helps explain why state authorities came to consider mining accidents – especially large ones – a threat to social stability. They were not “just” shocking events liable to generate anger and spread rapidly through traditional and online media, but also made a direct mockery of some of the regime’s most basic legitimizing claims. As *21st Century Business Herald* noted in 2005, “blood-stained energy propping up high-speed growth runs counter to the current central leaders’ emphasis on ‘placing people at the core’” (*21 CBH* 2005). Popular culture was blunter. A Shanxi saying commented that far from building a harmonious society, the government’s role in the coal industry

was simply to “arrange the funerals” once the workers had “sold their lives and the bosses’ made money” (工人卖命，老板赚钱，政府发丧). The widespread perception that official corruption was a key factor behind many accidents further sharpened this contradiction between legitimizing claims and reality. As Shue notes, allegations of corruption challenge “the authority of the entire system that stakes a claim to legitimacy on the basis of official selflessness and benevolence” (2004: p. 35f.). It also added a further source of anger and outrage over mining deaths.

That the state did consider mining accidents a threat to social stability is clear from state documents. For example, in 2005 the State Council noted that “in recent years large and extremely large coal-mine accidents have increased and occur frequently... [this] negatively impacts social harmony and stability” (对社会的和谐安定也产生了不良影响) (State Council 2005c: p. 97). Similarly, in 2004 Shanxi’s provincial government noted that “the occurrence of major accidents ... has a very bad effect on society.” (重特大事故的发生...产生了很坏的社会影响) (Shanxi 2004a). Near-identical statements can be found in many other state documents. The intensity of the concern is also demonstrated by the measures the state took or considered in order to counteract this threat: the media restrictions envisioned in the original draft of the 2007 *Sudden Incidents Response Law* (突发事件应对法), and the state’s effort to develop new techniques to control and steer public discourse in the late 2000s (“public opinion channelling”), discussed further in the next section. Indeed, while discussing mining accidents and Shanxi’s coal nationalizations, a senior manager of a major centrally-owned SOE told me that he considered being good at managing public opinion during sudden incidents like accidents to be one of the two most important skills required of a leader in China today (Interview 51).⁵⁸

Media coverage of mining accidents played a crucial role in turning mining accidents (and other “sudden incidents”) into a problem of social stability, because it transmitted emotionally-charged, legitimacy-sapping information to large numbers of people and could whip up public opinion. The essay by the senior SAWS official Wang Zhengmin develops this connection very clearly. It also provides a good illustration of officials’ worries. It was published in *Chinese Journalist*, one of the main professional journals for media workers, which is often used to transmit the “spirit” of the propaganda authorities to the media (Qian 2005).

According to Wang, whenever a large accident occurred, “the public opinion space (舆论场) is flooded with criticism from the people”. This “public opinion of the masses” (公众舆论) was unorganized, spontaneous, dynamic and sometimes extreme and blind, and “its power must not be underestimated”. Specifically with regard to industrial accidents, Wang wrote, “public opinion” was often dominated by “negative, one-sided and even mistaken” views. Media coverage was responsible for this: instead of reporting how state

⁵⁸The other key skill, according to this interviewee, was getting targets implemented by managing and supervising subordinates well.

agencies and enterprises at all levels had successfully improved the accident situation, the media preferred to “splash [news] of large and small car accidents, mining disasters and fires across entire front pages” (大大小小的车祸、矿难、火灾等在各类媒体版面上常见). This misled people into believing that the situation was getting worse, when actually it was getting better. Some media focused their reporting on the gruesomeness of the accident sites, made casual claims about the causes [of the accident] and published unverified death numbers. Other media outlets lacked a “rational recognition” (理性认识) of the complexities of improving the safety situation and expressed unreasonable viewpoints, such as that “reducing fatalities is no achievement, rather no deaths is a must” (少死人不是成绩、不死人才应该). All of this “created social instability” (造成了社会不稳定). Instead of exacerbating this, the media was urgently required to conduct “correct guidance of public opinion” and “dissolve extreme emotions” (化解偏激情绪) (Wang 2007).

3.5.2 State Efforts to Contain Coverage of “Sudden Incidents”

The rapid spread of internet and mobile communications technologies, the growth of commercial media and watchdog journalism, and the frequent occurrence of large industrial accidents and other disasters (e.g. earthquakes, fires, stampedes) over the 2000s thus posed a significant challenge to the state. One of its responses was to tighten controls and develop ways to better manage coverage and public opinion when “sudden incidents” occurred. There were several means available to the state for this – clamping down on watchdog journalism in general, restricting coverage of specific “sudden incidents”, and seeking to proactively set the news agenda when a “sudden incident” occurred – and at different times the state resorted to all three. How successful these efforts were, how extensively the Center really wanted to muzzle the media, and when and why it chose which approach remain unclear and deserves further study. Of interest here is mainly that these efforts were made, because this further demonstrates that the state considered “sudden incidents”, including industrial accidents like mining disasters, a threat to social stability on account of the public attention and emotion they could attract and generate.

3.5.2.1 General Tightening of Media Controls and Clamp Downs on Watchdog Journalism

Since 2013, the administration of Xi Jinping has launched one of the harshest crackdowns on civil society of the Reform era, including on independent-minded journalism (Bandurski 2015). Under Hu and Wen there was significantly greater tolerance for watchdog journalism and other forms of contentious behavior, but under their administration, too, repeated clamp-downs on the media occurred and the 2000s saw a gradual tightening of the level of censorship. From 2004 onwards authorities worked to close some of the loopholes that had facilitated independent and critical-minded coverage by

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the web portals. However, it took the state until 2007 to build up an effective system for monitoring and censoring portals (Distelhorst 2013: pp. 43–53). Controls and censorship of newspapers seem to have been stepped up, too. Senior editors at several outspoken newspapers were fired in the 2000s and in one case even jailed on embezzlement charges that looked very much like retaliation from a local government. In a marked departure from existing practices, pre-publication censors were installed at *Southern Weekend* in 2008 (Bandurski 2013). In 2004, in response to requests from provincial governments, the Central Propaganda Department banned newspapers from conducting “cross-regional supervision” (异地监督); i.e. conducting watchdog journalism outside their home province to exploit some of the gaps in the censorship system discussed in Section 3.3.1.3. The volume of daily censorship instructions seems to have grown substantially, too. One editor stated that while in 2003/2004 he would receive two or three censorship instructions a day from the Propaganda Department, by the late 2000s he was receiving 20 or more each day (Interview), something reported also by a web portal editor interviewed by Distelhorst (2013: p. 45).

This tightening did not eliminate all space for independent-minded journalism. Through to the early 2010s, media continued to break and investigate major stories. It is unclear whether the overall volume of critical reporting fell over the Hu-Wen years.⁵⁹ Indeed, investigative reporting has to some extent continued even under Xi (Han 2015). One reason for this was probably that the Center – or groups within the Center – continued to find “public opinion supervision” useful. Moreover, not all of the repeated tightening the media experienced was driven by the Center, or rigorously enforced by it. For instance, the ban on “cross-regional supervision” was only weakly enforced (Wagner-Givens and Repnikova 2011: p. 18; Hassid and Stern 2012: p. 1236). Similarly, as we will see in a few paragraphs, the most restrictive clauses of the original draft of the *Sudden Incidents Response Law* were dropped from the final version. Both of these would have primarily benefited local governments, at the (informational) expense of the Center.⁶⁰ It seems likely – though this awaits further verification – that the Center was less concerned with limiting watchdog journalism per se (because it benefited from local authorities living in fear of media uncovering local scandals and abuses) than with preventing such revelations from sparking major public-opinion crises. This is where efforts to restrict coverage of sudden incidents come in.

⁵⁹The veteran investigative journalist Wang Keqin – who was twice fired from newspapers over his stories – concluded in mid-2011 that watchdog journalism was in fact on the rise in China, with ever more journalists and outlets writing and publishing investigative stories of ever greater quality, and enjoying increasing societal respect (Wang 2011). Unfortunately, there is no empirical research on this very interesting question.

⁶⁰Several cases where individual newspapers or media workers were punished, too, seem to have been primarily or entirely a matter of local-government initiative.

3.5.2.2 Controlling Coverage of Sudden Incidents

The easiest way for the state to limit coverage of an accident was to prohibit it. Leaked censorship instructions show that the state repeatedly restricted how newspapers or web portals could cover accidents. According to interviewed editors, these instructions normally did not prohibit all coverage; rather, they might restrict outlets to using Xinhua copy, order them to refrain from questioning official claims about causes and fatality numbers, or refrain from covering it in a prominent way. For example, in December 2005, portals were ordered only to report a major accident in Hebei (108 fatalities) by using Xinhua copy. Furthermore, they were instructed “not [to] make large headlines, not to issue it at the top of the important news sections, not to publish it on the front page of websites, not to open news trackers, [and] not to make it into a special topic.” Web forums were not to discuss it, and commentaries not to be published.⁶¹ In April and June 2006, August 2007, December 2010, and November 2012 very similar instructions were issued to web portals with regard to accidents in Shanxi, Liaoning, Shandong, Henan and Guizhou respectively.⁶²

The state did not always censor accident coverage in this way. For example, investigations by the HKU China Media Project revealed that no instructions at all were issued about a major accident in Shanxi in 2006, in which 56 workers died (Bandurski 2006a). The above-cited instructions about the Hebei accident came at the end of a year (2005) which had seen very high levels of accident coverage (cf. Figures 3.1 and 3.2 above).

That instructions were issued sometimes, but not always, reflected the continual tug of war between the state’s competing priorities of public opinion supervision and guidance of public opinion. The fate of the *Sudden Incidents Response Law* reflects this push and pull. A draft version of the law was first presented in 2006 and would have given local governments extensive control over information flows when “sudden incidents” occurred: they were to be empowered to conduct “unified leadership” (统一领导) over media reporting the event and to be permitted to withhold information from the media if it was “not conducive to the management of the emergency” (不利于应急处置工作). Media that reported on the event “contrary to regulation and without authorization” (违反规定擅自发布…信息) or spread false information would be liable to fines up to RMB 100,000 (*Caijing* 2006). This sparked uproar among journalists and scholars, and was withdrawn. There are indications that some leaders or groups within the Center, too,

⁶¹The leaked instruction can be viewed at *China Digital Times*, <http://chinadigitaltimes.net/2012/11/censorship-vault-beijing-internet-instructions-series-7/>

⁶²See <http://chinadigitaltimes.net/chinese/2010/12/国新办：河南渑池巨源矿难;> <http://chinadigitaltimes.net/2012/11/censorship-vault-beijing-internet-instructions-series-13/>; <http://chinadigitaltimes.net/2012/11/ministry-of-truth-vulgar-video-explosions-and-more/>; <http://chinadigitaltimes.net/2013/01/censorship-vault-throwing-beggars/>; <http://chinadigitaltimes.net/2012/11/censorship-vault-beijing-internet-instructions-series-21/>

were unhappy about it.⁶³ A revised version became law in 2007, but dropped the most offending clauses. Media could only be fined for disseminating “fake” information (虚假新闻) (Hassid 2008). That the original draft included strong media control clauses is indicative of the concern felt at least within parts of the state over unrestricted coverage of sudden incidents; that it ultimately did not pass indicates that, as of 2006/2007 at least, senior leaders *also* were reluctant to completely foresake watchdog journalism as a tool to keep local authorities in line.

3.5.2.3 “Public Opinion Channelling”

Instructions of the type discussed above sought to deal with the occurrence of “sudden incidents” by playing them down and pushing them off the news agenda. However, by the late 2000s the propaganda system and other state bureaucracies were also experimenting with more subtle ways of gaining control of coverage of accidents and other “sudden incidents” while permitting them to remain on the news agenda. Media workers dubbed this strategy “grabbing the megaphone” (抢喇叭); the state spoke of “public opinion channelling” (舆论引导). This approach was first outlined in a 2008 speech by Hu Jintao. The basic thrust was to place a much stronger emphasis on proactively setting the news agenda and the dominant interpretation of “sudden incidents”, by getting the state’s version of events out fast and in a format that was attractive to readers and journalists alike. Rather than trying to hush things up, key central state media organs like Xinhua News Agency, China Central Television, and the *People’s Daily* and *People’s Daily Online* would provide rapid, high-quality, realistic and even critical coverage of key breaking-news events – albeit with criticisms directed away from the Center and the party-state as an institution, though not necessarily away from local authorities – while near real-time analysis of (online) opinion flows would enable the state to further hone messages to respond quickly and persuasively to developing opinion trends and calm down “extreme” public emotions. This does not mean that traditional media controls (e.g. content restrictions, orders to use Xinhua copy, etc.) grew less. On the contrary, ostensibly very open reporting by state media like Xinhua was sometimes combined with tight restrictions on the commercial media. But the focus was less on direct suppression of information than on setting and dominating the narrative.⁶⁴

This communications strategy can also be glimpsed in propaganda-work documents from SAWS and the State Council Work Safety Committee (SCWSC). SAWS sought to build up a system of trained press spokesmen. Beyond publicizing the agency’s activities and work safety-related regulations and experiences, they were to engage the media and public opinion when “major incidents” (重大事件, i.e. large accidents) occurred. Authoritative information was to be released speedily – especially to the central-state

⁶³For a blow-by-blow account and analysis of the fracas over the law see the postings at HKU China Media Project, especially Bandurski 2006b, 2006c, 2006d.

⁶⁴The commentary and analysis produced by the HKU China Media Project is once again the best guide to this development. See in particular Bandurski 2008a, 2009a, 2010c, and Qian 2009

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party media – and “the opinion initiative grasped”, according to the principles of “appropriately handling the incident, maintaining social stability and tranquil popular feelings, quietening the incident and resolving problems” (本着有助于事件的妥善处置、有助于维护社会稳定和人心安定、有助于事件平息和问题解决的原则，及时发布权威信息，掌握舆论主动) (SAWS 2008, similarly SAWS 2007a, 2007b, 2010a). In the same vein, SCWSC called for strengthening capacities to monitor and analyze “online public emotions” (网上舆情) and to “positively channel” these (正面引导, i.e. dispel negative and anti-regime sentiment). Online commentator teams (安全生产网络评论员队伍) were to be established. These would “rapidly detect and guide major online opinion movements as these develop, and provide online responses [commentary] at the earliest possible time when very large accidents happen.” (对网上重大舆情动向早发现、早引导，对特别重大生产安全事故情况要争取第一时间在网上作出反应) (SCWSC 2009, cf. SAWS 2006a, SAWS 2011).

By 2010 this strategy was being implemented with at least some major coal-mine accidents. One case where this can be documented relatively well is the March 2010 accident at the state-owned Wangjialing mine (王家岭煤矿) in Shanxi, in which 38 miners died. Coming just as Shanxi’s – very controversial – nationalization of private mines was being completed, the accident was intensely embarrassing to the state, and attracted substantial attention from liberal media outlets (which had largely opposed mine nationalization). The state’s response was to permit extensive coverage – with extensive restraints. Leaked CPD orders show that all media except for Xinhua (and probably CCTV and *People’s Daily*) were ordered to withdraw any journalists they had sent to the scene of the disaster. Coverage was to be positive (i.e., outlets were not to conduct watchdog journalism or publish critical commentary), orient itself by the Xinhua reports, and “highlight moving achievements of the Party and the government in rescuing the miners” (突出党和政府力救被困矿工之感人事迹). Media were forbidden to “seize on [the accident] to advance own agendas, like criticizing [nationalizations] in the mining industry” (不可借题发挥如批评矿业“国进民退”).⁶⁵ Meanwhile, Xinhua provided extensive coverage of the accident.

It is striking what kind of orders seem to have *not* been issued: orders of the kind we saw above, to *not* “make large headlines” or special-topic pages and to generally play down the accident. In fact, the Sohu portal created a large special-subject page about the accident (Sohu 2010). However, unlike the Sohu special pages from 2006 discussed in Section 3.2.3 that had sought to attract readers by provoking them to anger about corrupt officials and heartless bosses, this special focused on the rescue operations, the technical causes of the accident (and not the political-economic ones previous Sohu specials had investigated), as well as – albeit to a lesser extent – how the individuals responsible for the accident were being held to account. Most of the material was drawn from Xinhua and other party media. While 9 of the 49 photos on the page featured

⁶⁵The leaked instruction can be viewed at China Digital Times, <http://chinadigitaltimes.net/chinese/2010/05/2010年4月真理部指令一览>

negative scenes (mainly distraught relatives of the miners), these were buried at the bottom of the page. Most images – and all images at the top – featured positive or neutral scenes (relief as survivors meet their relatives, rescue operations, rescued miners undergoing hospital treatment).

3.5.2.4 Growing Coverage Restrictions over Time?

Did restrictions on covering mining accidents become more pronounced over time? The evidence is inconclusive. On the one hand, as we saw in Figures 3.1 and 3.2 above, coverage grew steadily until 2005, when it reached an all-time high after which it fell quite steeply until 2010 when a second, albeit smaller, high point was reached. Coverage again dropped in 2011. This would be consistent with the story frequently heard from media workers and domestic and foreign observers of Chinese politics, that from about 2008 onwards a general tightening of control over the media and other forms of contentious behavior set in as social and political conflicts intensified (e.g. Sun 2013). The effort to develop “public-opinion channelling” techniques is consistent with this. Indeed, in early 2011 the CPD seems for the first time to have issued blanket restrictions on coverage of “accident disasters and extreme incidents” (灾难事故和极端事件): Accidents with less than 10 deaths were to be covered exclusively by local media; larger accidents would be covered only by central-state party media. There was to be no cross-regional investigation of accidents, and no live coverage or on-going (regularly updated) reporting. These restrictions were reportedly justified with the intensifying social conflicts and the looming leadership transition.⁶⁶

On the other hand, while coverage was lower in 2011 than in 2010, it did not in fact drop precipitously: it was still higher than in 2008 and on about the same level as in 2009. Moreover, while 2010 saw six accidents with more than 30 fatalities, 2011 saw only one accident of this size. In other words, there was less to write about.⁶⁷ Accident occurrence at least partly explains why 2005 saw so much more coverage than the other years: five coal-mine accidents with more than 100 dead happened in 2005, as well as numerous further accidents with 30 to 70 fatalities. (cf. Wright 2012: p. 159). No other year saw such a series of truly large accidents. In short, while it is widely believed (and probably true) that political and social conflicts in China sharpened in over the 2000s and the state increasingly sought to clamp down on all kinds of contentious behavior, it is not clear to what extent that really narrowed the space to report on coal-mining accidents, at least until 2011.

However, in two other areas we do see signs for the state taking increasingly radical action over time in response to mining accidents and the intensive coverage they

⁶⁶The leaked instructions can be viewed at China Digital Times, <http://chinadigitaltimes.net/2011/01/2011-general-notice-from-the-central-propaganda-bureau/> and <http://chinadigitaltimes.net/chinese/2011/01/中宣部关于2011新闻宣传方面的通知/> (Chinese).

⁶⁷Indeed, this suggests that on an articles-per-accident basis 2011 may well have seen *more* coverage than previous years.

attracted: the use of the formal disciplinary apparatus to punish local officials over accidents (Section 3.6), and the restructuring of provincial coal industries (Chapters 4 and 5).

3.6 “Holding Accountable”: Accidents, Deaths and the Disciplinary Apparatus

This section discusses how the state’s formal processes for evaluating and disciplining officials responded to mining accidents and the media coverage they attracted. Chinese officials are subject to two main disciplinary processes that are relevant to accidents; the Cadre Evaluation System (CES), under which officials are given work targets and assessed on their completion (discussed in Section 3.6.1), and after-the-fact investigations to establish the causes of “bad” events like accidents and punish those responsible for their occurrence, including senior local officials with overall “leadership responsibility” (领导责任) for events in their locality (Sections 3.6.2 and 3.6.3). Both practices were used to encourage officials to improve mining safety in their localities.

Little is known about how these processes for evaluating and disciplining officials really operate, as data are hard to come by. With respect to mining and other work- and public-safety accidents, the evidence suggests that in practice they tend to punish officials particularly severely for the occurrence of *large* accidents, especially when these attract significant public/media attention, while disciplining officials only weakly, if at all, for high aggregate death tolls and poor work safety, *provided these deaths accrue through many small accidents*. Officials do have positive incentives to improve safety and bring overall death numbers down, but they seem not to face significant *negative* incentives (punishments) for failing to do so. Large accidents, especially ones that attract heavy public attention, can trigger quite harsh sanctions, however. This means that officials in provinces with many large or well-publicized accidents seem to come under greater disciplinary pressure over work-safety than officials in provinces with, objectively, significantly worse safety records but few large accidents: the system is focused on highly visible incidents, not on quiet disaster zones.

That the disciplinary processes operates in this fashion partly reflects deliberate choices by the state. These are explicable in terms of a concern to prevent major sudden incidents and public-opinion crises, and firmly incentivize local officials to avoid these above all. But it also reflects unintended elements: how the Cadre Evaluation System (CES) works in practice (as opposed to intention), and the need to respond to (perceived) “popular fury” (民愤) over accidents. I next try to document these claims.

3.6.1 Treatment of Mining Accidents in the Cadre Evaluation System

Of the two disciplinary practices, the CES has received most attention from scholars.⁶⁸ Under the CES, each level of government signs a yearly performance contract with the next-higher level of government. At the township level, these contracts can run to over 100 pages in length (Ong 2012: p. 79). The contract sets specific, often quantitative, targets for the lower level for all major (and many minor) policy objectives, e.g. number of births, level of economic growth, fiscal remittances, etc. The targets derive ultimately from the province or even the Center, though lower levels can enter own targets. The targets are then divided up among ever-lower levels of government (i.e., a city receives a target from the province, then divides up this target among its subordinate counties, who further divide it up among their villages/townships). At year end, each level is evaluated on its success in meeting the targets by the next-higher level. Cadres receive points for each target, depending on how well they met it. Targets are ranked, with “soft” targets commanding the lowest level of priority and “veto” targets the highest – failure to achieve them will, at least in theory, cancel out all other achievements and make the cadre ineligible for promotion that year. Minimum numbers of points are necessary for the cadre to be assessed as “excellent” (优秀, necessary for a promotion) or to at least get a pass (necessary for monetary bonuses). Failure to be passed can, in theory, lead to sanctions such as removal from a position.

As early as 2000, some provinces had begun including work-safety targets in local leaders’ performance contracts,⁶⁹ but the practice was only rolled out on a consistent nationwide basis in 2004, when the central government began setting work-safety targets for all provinces, a practice it continues.⁷⁰ There are three different types of targets; “absolute targets” (绝对控指标), which set a number for maximum permissible deaths in work-safety (and traffic) accidents; “relative targets” (相对控制标) which set a maximum permissible ratio of deaths for various indicators (per tons of coal mined, per

⁶⁸The most important analyses of the CES are Edin (2003), Heberer and Trappel (2013), Heilmann and Melton (2013), Hon Chan and Jie Gao (2012), Jie Gao (2010), Ong (2012: pp. 76–84), Smith (2009, 2013) and Whiting (2004). See also Wang (2013). Other analysts have used statistical analyses to estimate whether superior performance on presumed CES targets indeed leads to promotion. (The findings are contradictory, but tend to suggest that generating tax revenues matters more for promotion than generating growth, though factional ties may trump all else: see Li and Zhou 2005; Guo 2007, 2009; Shih et al. 2012; Wu et al. 2013). The general features of the system (as described in this paragraph) are quite well-understood; the main open questions – which have proved hard to answer, given data problems – are under what circumstances the system successfully structures local leaders’ incentives as intended and when it generates perverse outcomes (e.g. gaming), how significant performance evaluations really are for promotion, and which (if any) of the numerous and sometimes contradictory “hard” and “veto” targets that cadres must, supposedly, meet for promotion really count.

⁶⁹Guizhou set some form of work-safety target for local leaders as early as 2000, and made its achievement a veto time, though I have been unable to ascertain the exact nature of the target. See Guizhou (2000) and (2001).

⁷⁰This paragraph is based on Chan and Gao (2012).

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100,000 people, per RMB 100 million in GDP, etc.), and targets for the maximum permissible number of accidents of different size classes (3–9 deaths, 10–30 deaths, etc.). The targets for absolute fatality and accident numbers are further divided up among different industries (maximum permissible number of coal-mining fatalities, etc.). In total, there seem to be 27 separate targets (cf. Shanxi 2007a), and their achievement has generally been made a veto item for local governments. The precise numerical targets for each province are calculated by the State Council Work Safety Commission according to a defined numerical formula, essentially the average fatality number of the locality (or industrial sector) over the past three years, reduced by a certain fixed percentage (3.5% in the case of coal-mining in 2006), which seems to be the same for all localities nationwide (see Wang 2006).⁷¹

Both work-safety in general and coal-mining safety in particular improved significantly over the 2000s (see Figures 3.12 and 3.14 above). The inclusion of work-safety targets and their ranking as priority/veto items in local leaders' performance evaluations almost certainly contributed to this by encouraging them to devote more attention and political capital to safety issues (Chan and Gao 2012). What this thesis seeks to explain, however, is not why accident fatalities fell, but why some provinces ultimately implemented radical, rent-destroying coal-industry restructuring policies (i.e., large-scale closure and nationalization of private mines) while others did not. The overall argument of the thesis is that some provinces came under much greater pressure than others over mining accidents, because of the way varying accident patterns stimulated different levels of media coverage and, as we shall see in the next section, disciplinary punishments. But the foregoing paragraphs raise the question of whether the inclusion of safety targets in cadre evaluations might not have played a significant role in generating such pressure on provinces as well.

This question cannot be answered definitively, due to the lack of data: systematic information about provinces' work-safety targets is almost never published, making it impossible to assess whether some provinces were consistently much worse at hitting their targets than others.⁷² However, what (fragmentary) data are available and what we know about the operation of the CES in general, both suggest strongly that it is very *unlikely* that the inclusion of work-safety targets in the CES would have generated the level of pressure necessary to persuade provinces to undertake these very controversial and costly policies.

Regarding the success with which provinces hit the targets, the available data present a mixed picture. We know that in 2008 Shanxi missed six work-safety targets, three of which were mining-related (*Shanxi Youth Daily* 2009). On the other hand, in 2004

⁷¹I am indebted to Chan and Gao (2012) for this reference. It is not clear how the percentage by which fatalities are to be decreased by is arrived at.

⁷²Since the targets required the same margin of improvement for each province relative to its average past safety performance (e.g. 3.5% fewer deaths by year X) it does not seem as though some provinces faced much more exacting targets than others.

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Shanxi hit its target for aggregate deaths in coal mines,⁷³ and as early as 2007 Shanxi hit the target set for 2010 for reducing the number of deaths per tons of coal mined.⁷⁴ It should be noted that the nationalization decisions in Shanxi were taken before it would have become clear that several 2008 targets were being missed.⁷⁵ The one year for which comparative data for all provinces are available is 2009 (SAWS 2010?, with data for 11 safety indicators). A single year is too little to falsify an alternative hypothesis, but it certainly does not support it, since the only two of the case-study provinces to miss mining-related targets, IMAR and Guizhou, are provinces that conspicuously failed to implement the kind of large-scale rent-destroying industry restructuring of interest to this thesis. Indeed, only a single province (Xinjiang) hit all of the safety targets for which we have data in 2009. Most provinces missed multiple targets, sometimes by up to 200%.

More generally, it is unclear what the incentives and pressures created by the CES in regard to work safety really are. As long as work safety could be improved without significantly interfering with production (i.e., tax, rent, and job creation), local leaders should have had strong or even very strong incentives to emphasize strengthening work safety. The question for this thesis is whether the incentives created by the CES would have been strong enough to encourage leaders to emphasize occupational safety also at the expense of production. Here there are reasons to be skeptical. One of the main weaknesses of the CES is that it has little scope for adjudicating between competing priority targets (Gao 2010: p. 69). Yet seriously curtailing production by local private mines, as closures or nationalization entailed, clashed directly with at least three other objectives that, the literature has found, both the CES and more informal political norms have very consistently emphasized as overriding priorities and important for promotion: fiscal revenue, economic growth, and social stability⁷⁶ (CCP Central Orga-

⁷³Reportedly, Shanxi was given a target of no more than 495 deaths in coal mines in 2004 (*Southern Weekend* 2007a). Actual deaths came to 485 (CCIYB 2005: p. 557).

⁷⁴Shanxi's *Eleventh Five-Year Plan for the Coal Industry* set a target of reducing the number of deaths per million tons of coal to "below 0.8" by 2010 (Shanxi 2007b). It can be presumed that this target closely reflected the target given to the province by the central government. Already in 2007 the rate had come down to 0.75, and in 2008 it fell further, to 0.47 (cf. Chan and Gao 2012: p. 370, Table 2).

⁷⁵The mining-related targets Shanxi missed were those for 1) total deaths in accidents in industry, mining, and commercial enterprises, 2) for the total number of fatalities in "especially large" accidents (重特大事故, defined as 30 or more deaths), and 3) for the number of "relatively large" coal-mine accidents (较大事故, defined as 3–9 deaths). The first two target were missed mainly on account of the unprecedently large "kuiba" accident mentioned earlier in this chapter, where the dam of a tailings pond collapsed and inundated a village; if this accident is excluded, Shanxi would have met both targets easily (see the numbers reported in *Shanxi Youth Daily* 2009). The third target was missed very narrowly – by a single accident. The kuiba accident occurred on 8 September 2008; coal-mine nationalization was officially announced on 2 September.

⁷⁶The smaller-scale private mines generated large numbers of jobs, which fell away when they were closed. Many mining regions in Shanxi and elsewhere experienced significant employment problems after nationalization. (Interview 39 [official from a municipal coal industry bureau in Shanxi], Interview 3 [journalist specialized on energy issues]).

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nization Department 2014; Heilmann and Melton 2012: p. 35; Ong 2012, Smith 2009, 2013; Wu et al. 2013; Kung and Chen 2014). In other words, even if achieving CES priority targets matters for career advancement – something about which the evidence is ambiguous⁷⁷ – by itself this tells us little about how cadres prioritize *competing* veto targets. Indeed, there is suggestive evidence that other things equal, they will usually prioritize tax-revenue and growth targets, even at the cost of missing other targets.⁷⁸

The point is not that local and provincial leaders did not come to give great importance to coal-mine safety, to the point of undertaking costly, rent-destroying changes. Rather, my argument is that it seems implausible that the inclusion of safety targets in the CES should have been the decisive factor leading to this. A further important reason for this view is that, in practice, the CES seems almost *never* to work as a sanctioning mechanism. While success at meeting targets may help one achieve promotion, *failure* to meet targets seems basically never to lead to punishments. The best research on this is by Heberer and Trappel (2013), who interviewed leading local cadres and Organization Department staff in 14 counties across 8 provinces. They conclude that “only in extreme cases of misbehavior, *usually those that have gained regional or national media attention*, does [the CES] work as a sanctioning mechanism.” (Heberer and Trappel 2013: p. 1055, my emphasis). Based on interviews in a county in Shaanxi, Gao similarly concludes that higher level authorities are reluctant to harshly penalize subordinates for failing

⁷⁷Interviews and observations suggest that leading cadres who seek promotion feel under strong pressure to hit targets (Heberer and Trappel 2013: p. 1054; Smith 2013: p. 1035; Ong 2012). Statistical correlations have been demonstrated between promotions and GDP and, especially, tax-revenue growth and delivering political prestige projects, particularly big infrastructure projects – all things commonly understood to be prioritized by the CES (Li and Zhou 2005; Guo 2007, 2009; Wu et al. 2013; Kung and Chen 2014). But there is also strong evidence, including very good statistical work, suggesting that factional and patronage ties and corruption (sale of offices) play a large, even dominant role in determining promotion (Gao 2010; Hillman 2014; Pei 2004, Shih et al. 2012; Smith 2009, 2013). This is supported also by Chinese ethnographic studies (see Hillman and Smith for citations), and by surveys of the CCP Organization Department, which found that the local leader (一把手, usually the party secretary) has the dominant say over promotions (*PD* 2014). Hillman finds that cases of extreme incompetence aside, “well-connected officials could advance … even while leaving a trail of administrative disasters behind” (2014: 109–110). The issue is further complicated by the fact that economic and tax-revenue growth and big construction are not only important CES targets, but also among the main channels through which local official self-enrichment occurs. Hence their correlation with promotions may simply reflect the operation of patronage networks and corrupt exchange relations.

⁷⁸Heilmann and Melton (2013: p. 35) discuss this in the context of energy-efficiency targets, which confronted local cadres with a similar conflict as work-safety targets. Energy efficiency targets were made priority (veto) targets in the Eleventh Five-Year Plan and given extreme political importance by Wen Jiabao personally, yet their rigorous pursuit could undercut local growth. Provincial-level “plan evaluators” Heilmann interviewed felt that local cadres had taken the targets seriously, but “also made it clear that … economic and revenue growth remained de facto the most important performance criteria for local cadres.” A 2013 survey of local and provincial cadres by the CCP Organization Department found that in practice economic targets continued to make up 60–70% of evaluations and “social and welfare” targets (社会民生, which includes things like work-safety and environmental protection) only 25–30%, even though in principle (观念中) the ratio was to be the opposite (*PD* 2014).

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“[to] meet some targets as a result of making efforts to accomplish the others”, going as far as to “purposely evade” specifying the exact circumstances that determine whether subordinates actually failed to meet a priority target (2010: p. 70).

The purpose of the evaluations, according to Organization-Department directors interviewed by Heberer and Trappel, is “not to punish officials but to bring them in line with the policy and developmental requirements and to identify their problem-solving capacity.” It is a communication device, through which higher levels make their priorities known to lower levels and receive feedback about problems (2013: pp. 1054, 1060). The CES does formally include a sanctioning component – officials twice consecutively rated as incompetent are to be removed from office – but in practice this appears hardly ever to happen. Data are again scarce, but Burns and Wang (2010: p. 73) find that in their field sites well *over* 99% of officials were rated as “outstanding” or “competent”, making them eligible for promotions or at least bonuses and pay rises, and suggest that the national situation was similar.⁷⁹

My research tends to support this. As the next section discusses, while disciplinary sanctions were meted out to hundreds of officials over accidents, this took place in the context of investigating responsibility for specific, individual accidents – an entirely different process to the Cadre Evaluation System. I know of no case where a cadre was disciplined for failing to meet CES work-safety targets.

3.6.2 Post-Accident Investigation and “Holding Accountable”

When mining accidents (or other “bad events”) occur, the Chinese state requires these to be formally investigated and responsible parties to be held accountable. Depending on the outcome, private companies and their owners and managers can be fined, prosecuted, forced to pay compensation, or closed down. Civil-service regulations threaten officials with administrative punishments from warnings to permanent expulsion from the civil service if the accident is attributable to official negligence, malfeasance or dereliction of duty, and with criminal prosecutions if they are found to have violated laws. Formal regulations to this effect have existed since 1957 and were reaffirmed in 1989 and 1993 (State Council 1957, 1989, 1993). Documented cases where major industrial accidents, including mining accidents, were investigated and officials disciplined go back at least to 1979 (see Shan et al. 2004). However, from 2001 on the Center and provincial authorities issued a flurry of documents that specified more precisely local leaders’ work-safety responsibilities, how mining accidents were to be investigated, and in some cases defined minimum punishments for certain offenses and events. They also defined new accountability measures besides the traditional menu of disciplinary punishments for contraventions of bureaucratic rules and procedures, namely forced

⁷⁹An official they interviewed from the Ministry of Personnel claimed that in 2002, only 0.3% of officials were rated “incompetent”. I am indebted to Heberer and Trappel for the reference to Burns and Wang’s work.

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resignations (引咎辞职、责令辞职) and removals (免职), through which leaders who bore overall political responsibility for an event without being directly implicated in it or having breached rules could be “held accountable”.

Two features stand out about both the formal structure of the disciplinary regime thus created, and the way it was actually implemented: firstly, a strong focus on the *size* of accidents. As per regulation, larger accidents attracted sanctions that are more severe and target higher-level officials than sanctions for even large numbers of small accidents. Secondly, *de facto* responsiveness to public opinion and media coverage, with accidents that attracted public attention seeming to attract more severe sanctions than those that did not.

3.6.2.1 Focusing on Size

The focus on size takes two forms: investigative procedures and stipulated punishments. Accidents are investigated by ad-hoc committees formed after the accident and comprising leading officials from the Work Safety Inspectorate, Public Security, the Coal-Industry Bureau, Discipline Inspection (监察部门), the Labour Union, the Procuracy, and government leaders (e.g. provincial governor, county head, etc.). The investigatory committee also issues “recommendations” (建议; which are to be followed) for disciplinary sanctions. The crucial issue is the administrative level from which this committee is staffed, which depends on the accident’s size: accidents with 30 or more deaths are investigated by central-level departments (i.e., national-level Work Safety Agency, etc.); accidents of 10 to 29 fatalities by provincial-level authorities; and 3 to 9 and 1 to 3 fatalities by city and county authorities (State Council 2007b; cf. State Council 1989, Shanxi 2001a, Huang 2001). The higher the level of government from which the committee drawn, the more removed from local influence it is and the stricter the investigation and possible sanctions can be expected to be. Which level of government performs the investigation also determines *de facto* who the highest officials are who can be sanctioned, since it will only issue sanctions to officials who rank below the committee members.

The delegation of investigative responsibility is probably partly a matter of practicality – there are thousands of accidents in China every year – but given that the phenomenon of stricter central and more lenient provincial and local authorities is well-understood in China, it also expresses a political prioritization. The Center is effectively signaling that smaller accidents are politically sufficiently non-sensitive as to be left to local and provincial authorities.⁸⁰

Central and provincial documents explicitly gradate punishments and the rank of punished officials by accident size. The most important regulation in this regard was the

⁸⁰It is interesting to note that the cut-off line for central investigation, 30 deaths, is also the rough cut-off line below which journalists suggested that media interests begins to diminish (cf. Section 3.4).

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State Council's 2001 "Regulation on Investigating Administrative Responsibility for Major Accidents". This stipulated that the "main leaders" (主要领导人) of county and municipal governments could be given disciplinary sanctions if "major" (特大) accidents occurred due to official negligence or dereliction of duty, or if they held "leadership responsibility" for the accident (有失职、渎职情形或者负有领导责任), with criminal prosecutions if they had committed crimes (Article 2). What a "major" accident was was not further defined, but probably refers to accidents with 10 or more fatalities.⁸¹ In other words, accidents below this size would *not*, in general, lead to sanctions for government leaders above the village. The document instructed local governments to carry out numerous tasks to improve industrial safety (e.g. regular inspections for risks) and reiterated that operating licenses for mines and plants could only be issued to qualified individuals and firms. If local authorities failed to carry out these tasks as stipulated and "major" accidents occurred, then, "depending on the severity of the situation" (根据情节轻重), they were to be demoted or dismissed (降级或者撤职), (Article 14). If the accident had "especially vile societal impacts or its nature was particularly serious" (社会影响特别恶劣或者性质特别严重) the provincial governor too could be sanctioned (Article 15).

The 2001 regulation was followed up by a document in 2004, which specified that party and government leaders at the county level and above could be requested to resign (引咎辞职) if "large" (重大), "major" (特大) or "extremely large" (特别重大) accidents occurred once or multiple times and they bore "major" or "important" "leadership responsibility" (主要, 重要领导责任) for these (CCP Central Committee and State Council 2004). Further central documents making local leaders liable to be disciplined or forced to resign for large accidents were issued in 2007 and 2009 (State Council 2007c, CCP Central Committee and State Council 2009). Throughout these years, very similar regulations was issued by provinces, with the central-state documents generally cited as providing the enabling authority (see e.g. Shanxi 2001b, 2004a; Guizhou 2001a, 2001b 2004, 2006a).

Several aspects of these documents deserve comment. Firstly, while they singled out large accidents as calling for specific disciplinary measures, these documents rarely threaten comparable sanctions for high aggregate death tolls or poor safety situations as measured by statistical ratios like fatalities to output. The only ones to do so were two regulations from Guizhou (2001b, 2006), which included missing aggregate death targets in catalogues of safety-related offenses that may result in disciplinary sanctions. All other offenses in these catalogues, however, concerned the occurrence, cover-up or

⁸¹ Article 3 stated that "concrete definitions" (具体标准) of "major accidents" were to be specified in "relevant state regulation" (国家有关规定). I have not been able to find any such regulation before 2007 (when the terminology used to classify accidents was in any case altered and the classification "特大" dropped). However, in 2001 provincial regulation in Guizhou defined "major" (特大) accidents as 10 or more deaths (Guizhou 2001a), and the same year regulation in Shanxi stated that this State Council document was to be used for handling accidents with 10 or more deaths (Shanxi 2001b). Shanxi regulation from 2004 also defined "特大" as 10 or more deaths (Shanxi 2004b).

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mishandling of *large* accidents. Despite going through hundreds of newspaper articles and other documents reporting disciplinary sanctions, I know of not a single case where municipal, county or village leaders were in fact disciplined over poor aggregate death tolls or safety situations. It is thus unclear how seriously this was ever meant. Indeed, another order by the Guizhou government from 2004 actually formalizes the unequal treatment of deaths depending on accident size, stipulating that responsible officials would be held accountable if *either one* accident with 10 or more fatalities *or five* accidents with 3 to 9 fatalities occurred within three months of each other (Guizhou 2004). In other words, at the limit, 45 deaths weighed as much as, say, 20 or 25 deaths, provided the latter occurred in a single incident and the former in multiple ones.

This focus on accident size is unusual. Contemporary Western safety-performance management systems generally do not treat accident size as such as a significant safety indicator.⁸² The reason for this is that, as Andrew Hopkins (2007), a specialist on occupational safety, notes, major accidents are too rare to yield meaningful information about the safety management of a plant or a mine. The frequency of minor accidents is a much better indicator of the likelihood of a future major accident. However, the focus on large accidents is understandable in light of the CCP's concern over "sudden events" discussed above. From the perspective of regime stability, it matters whether fatalities occur in large or in small accidents, and putting in place disciplinary structures to encourage officials to avoid *large* accidents above all is rational, albeit perhaps ethically questionable.

The second feature of these documents worth noting is that behind an outward appearance of precision, they are in fact quite vague and thus give decision makers substantial scope for flexibility (and arbitrariness) in deciding over whether and how severely to discipline which officials. Key terms such as the "severity" of the accident (情节轻重), "negligence" (失职、渎职), "serious errors" (严重失误), "criminal dereliction of duty" (忽职守罪) or "vile societal impacts" are never defined. The "main leaders" (主要领导人) of a locality (e.g. a county) in principle include the county head, the deputy county heads responsible for work safety or industry, and the party secretary, but documents usually refrain from identifying any specific position as the one holding final responsible for work safety. Discussions of the administrative accountability and disciplinary procedures by Chinese legal scholars frequently criticize this vagueness and the scope it gives for arbitrariness (随意性) and selectivity (选择性) (e.g. Gao 2014, *Legal Daily* 2008, *Beijing Youth Daily* 2009, *The Beijing News* 2008, *People's Daily Online* 2011). Overall, this flexibility probably tends to work to the benefit of officials as, without external pressure, investigators – especially those staffed from local and provincial bodies – are more likely to err on the side of leniency than of severity. However, external pressure can alter this, which brings us to the way media coverage and public attention seem to influence the disciplinary system.

⁸²For example, the official Queensland Mines and Quarries Safety Performance and Health Report features no such indicator. See Queensland (2013).

3.6.2.2 Responsiveness to Media Coverage and Public Attention

Because many factors will influence disciplinary decisions over any individual accident, it is difficult to demonstrate conclusively that media coverage and levels of public attention influenced disciplinary outcomes significantly. As discussed in the next section, the available data on officials disciplined over mining accidents, however, are consistent with this hypothesis. Further evidence supporting this hypothesis comes from interviews and commentary by Chinese officials and scholars, who frequently argue that media coverage and public attention significantly influenced disciplinary practices.

Among the published materials I know of, the connection is drawn in most detail by the deputy chief justice of the Guizhou provincial court, Li Hanyu (李汉宇). In September 2008 Li was commissioned to undertake a detailed study of the administrative accountability system (行政问责制度) for the Chinese People's Political Consultative Conference.⁸³ The report has not, to my knowledge, been made publicly available, but Li disclosed some of the main conclusions in an interview with the *Beijing Youth Daily*.⁸⁴ The report was written in consultation with senior legal scholars and a member of the Supreme Court, with primary data collected through interviews with officials in Shanxi and possibly other provinces.⁸⁵ Speaking specifically about accidents in Shanxi, Li stated that his research had found that disciplinary measures were often implemented hastily and without detailed investigation, “especially if [the accident] drew high levels of public attention” (尤其是舆论关注度比较高). The extent and/or severity of punishments also varied with the degree of public attention: “if an incident or accident attracts extensive attention from public opinion”, he had found, “it can easily unleash a storm of disciplinary sanctions. But if it does not draw an intense societal reaction, even large incidents are made molehills of and small ones entirely swept under the carpet.” (行政问责的随意性太强了，某一事件、事故被舆论广泛关注，就可能掀起一阵问责风暴。如果社会反响不强烈，就可能大事化小，小事化了。) (*Beijing Youth Daily* 2009).

A year earlier, Yu Yukai (汪玉凯), a professor at the National School of Administration (国家行政学院) made much the same point. Up to what rank officials were sanctioned after an accident would depend on “how terrible” (恶劣程度) the accident was and the “degree of public attention” (公众的关注度) (*The Beijing News* 2008).⁸⁶ The already-cited senior manager of a major centrally-owned SOE agreed: according to him, senior

⁸³A sort of consultative “Upper House” that sits in parallel with the National People’s Congress.

⁸⁴The report is entitled “Research and Recommendations On Completing and Perfecting the Administrative Accountability System” (关于健全和完善行政问责制度的研究和建议) and was completed in early 2009 or late 2008.

⁸⁵Field research definitely took place in Shanxi, but the formulation in the interview (曾到山西等地进行过调查) is ambiguous as to whether research was conducted elsewhere as well.

⁸⁶For further discussions of these issues by Chinese scholars, who often were quite critical of the tendency for disciplinary practices to become a “theatrical performance put on to calm popular anger and curry favor with public opinion” (问责制成平息民愤、取悦舆论的表演) see *China Comment* (2009).

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officials feared negative news stories and sudden incidents – including negative news about incidents for which they bore no direct personal responsibility – because if these garnered substantial public attention that could generate an unstoppable momentum forcing the Center or the province to sanction them, as a way of managing public opinion and irrespective of their direct personal responsibility. Significantly for this thesis, he himself brought up the case of senior Shanxi leaders forced to resign over mining accidents as an example to illustrate this dynamic (Interview 49). A senior municipal official in a coal-mining province who in the recent past had held work-safety responsibilities agreed: while all accidents would be investigated and responsible individuals disciplined, if there was substantial media coverage this was likely to lead to a wider range of officials being disciplined and the punishments being more severe (处分面和严重性更大) (Interview 69).

The political logic behind this behavior was explicated by an official from a township Organization Department and a professor from a major Beijing public-policy school. They both argued that when major negative events occur that attract much attention from public opinion, the state had to hold *someone* accountable to demonstrate responsiveness and appease public opinion. Strikingly, both again brought up the case of officials resigning or being dismissed over mining accidents in Shanxi as examples of this dynamic (Interviews 89, 63). The bigger the incident and the greater the level of public attention, the higher-ranking the disciplined officials would have to be: recall the stipulation in the above-quoted State Council regulation that if accidents had “especially vile societal impacts” or were “particularly serious” officials up to the provincial governor could be sanctioned (State Council 2001). One can glimpse this dynamic also in the way criminal trials of bosses and officials responsible for mining accidents were sometimes conducted. The sentencing of the individuals responsible for the 5 December 2007 mine blast that killed 105 workers in Linfen City (临汾), Shanxi, took place in the Linfen sports stadium and was reportedly attended by over 10,000 people (CCTV 2008).

This section has provided evidence from state disciplinary regulation and comments from Chinese scholars and officials suggesting that disciplinary punishments meted out to local and provincial officials over accidents varied with the size of the accidents and the level of media attention they attracted. But is there empirical support for this hypothesis? Were officials in provinces with many large, intensively-covered accidents sanctioned more severely than officials in provinces with high death tolls but few large accidents and/or little media coverage? The next section tries to answer this question. The answer matters, because it can help explain why officials in some provinces but not others ultimately opted for radical industrial restructuring.



Figure 3.15: Public Sentencing of Convicted Bosses and Officials in Linfen

3.6.3 Varying Disciplinary Patterns: Comparing Shanxi and Guizhou

Obtaining the necessary data to compare disciplinary practices in different provinces proved difficult, as Chinese state units rarely report this information in the kind of consistent and comprehensive format needed for rigorous comparisons. Performing responsiveness and accountability to the public requires *some* information about sanctions to be disclosed in the aftermath of accidents; unfortunately, it does not require the disclosure of comprehensive, precise and consistent information. Through large-scale searches of newspaper data bases, scouring yearbooks, searching the internet for reports about disciplinary measures taken after specific known accidents, and “snow-balling”⁸⁷, I was able, however, to build a data set that suffices for some basic comparisons. Due to the very large amount of labour involved, I limited myself to a comparison between two provinces; Shanxi and Guizhou. These represent extreme cases : a province with many large and very large, intensively-covered accidents and a relatively high absolute death toll in aggregate albeit a low *relative* death toll (normalized for the size of its coal industry) and one of the best relative safety performances as measured in deaths per tons of output (Shanxi); and a province (Guizhou) with few very large accidents and little media coverage, but with the highest absolute death toll of all provinces and one of worst safety performances. As luck would have it, they are also the only case-study provinces for which I was able to find a small set of apparently-comprehensive and directly comparable official data on disciplinary sanctions for eight years in the mid-2000s. Shanxi and Guizhou are, of course, also central the overall question this thesis seeks to answer, since it was Shanxi which pioneered nationalization while Guizhou refrained from it, despite its much worse safety record.

The comparison is not perfect, because Guizhou had both far fewer large accidents *and* much less media coverage than Shanxi, making it impossible to isolate the separate effects of each of the two variables. Unfortunately, no provinces exist that manifest these variables in combinations that would allow testing the separate effects of each. However, the comparison does permit us to test a more basic hypothesis: that China’s disciplinary system is much more punitive towards officialdom responsible for accidents and negative events that are big and thus attract or are likely to attract substantial public attention, than towards officialdom responsible for work-safety or other situations that may be objectively worse (more deaths, more dangerous work environments, etc.) but do not attract attention or are less likely to do so.

⁸⁷Internet searches for information about sanctions handed out after accident A often turned up additional information about known accident B, and unknown accident C.

3.6.3.1 Types of Punishment

Officials and mine owners are subject to four different types of punishments:⁸⁸ criminal prosecution, administrative disciplinary sanctions, party disciplinary sanctions, and administrative fines. Administrative fines (行政处罚) mainly affect mine owners, not officials; criminal prosecution both. Administrative disciplinary sanctions (行政处分) are given to officials who hold government (state) offices; party sanctions (党内处分) to officials who hold party positions. There are six levels of formal administrative sanction – administrative warning (行政警告), demerit (行政记过), offense (行政记大过), demotion (行政降级), dismissal (撤职), and expulsion (开除) – and four levels of party sanctions; party warning (党内警告), serious party warning (党内严重警告), suspension from party membership, and permanent expulsion (开除). Cadres who serve simultaneously in government and party posts can simultaneously be issued party and administrative sanctions. Expulsions – i.e., permanent loss of party membership and civil-servant status including pension and healthcare rights – seem only to be given to cadres found guilty of crimes who are handed over to the judiciary for prosecution. The next most serious disciplinary sanction is dismissal. Contrary to appearances, this does not generally involve permanent expulsion from the civil service. Rather, the official is removed from their post, automatically demoted by one or more ranks, becomes ineligible for reappointment to another post for 24 months, and may not be reappointed to their previous post. The main effect of the other sanctions is to make the official ineligible for promotion or salary increase for a defined period, from 6 months (warning) to 24 months (demotion). Party sanctions have the same consequences. In addition to these sanctions, officials can also be removed (免职) or obliged to resign (辞职). Resignation and removal are not formally part of the traditional civil-service and party disciplinary framework, but have in recent years come to function as an extension of it. They seem to be used especially to “hold accountable” officials deemed to have overall “leadership responsibility” (political responsibility) for an event, without being directly culpable, though. Officials who are removed or resigned may not be reappointed to new positions before at least one year has gone by.

How serious a threat are these sanctions for officials? Interviewees gave different answers to this question. One interviewee – a senior municipal official (处级) in a coal province who in the recent past had been responsible for the work-safety portfolio – felt that officials certainly took them very seriously and were highly concerned to avoid them (Interview 69). By contrast, a provincial official (处级) – who did not work in a coal province – felt that if the sanction was due to an event essentially beyond the official’s control, such as an accident, the impact might be limited (Interview 90). There are also claims – whose accuracy I have been unable to verify – that by the late 2000s Shanxi

⁸⁸This paragraph is based on two interviews with division-level (处级) cadres who worked in a provincial and a municipal administration, respectively (Interview 90, Interview 69), explanations of the disciplinary regime by Chinese academics (Ren 2007; *The Beijing News* 2008), and relevant state documents (State Council 2007c, CCP Central Committee and State Council 2004, 2009).

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officials were becoming increasingly wary of taking up posts in local government that could expose them to the risk of being sanctioned over mining accidents (BBC 2009, *China Newsweek* 2008, *Southern Metropolis Daily* 2009a, Tan 2009).

Why would this be so, since the effect of even a dismissal will be voided after two years? This is not fully clear. One reason may be that while they may ultimately return to a position of equal rank it is by no means certain that they will also be reappointed to a position of equal value for advancing their further career. As Smith (2009) notes, offices of equal rank can vary greatly in terms of their real power and revenue-generating potential. For example, Xia Zhengui (夏振贵), the party secretary of Linfen City in Shanxi, who was dismissed after the 2008 kuiba accident, and Meng Xuenong, who was obliged to resign as governor for the same accident, were both ultimately appointed to new positions in 2010 (Meng) and 2013 (Xia), but in both cases to what appear to be significantly less powerful positions, and neither career has since advanced further.⁸⁹ (Others however were luckier: Li Tiantai (李天太), the Mayor of Linfen who was removed and demoted after a major mining accident in 2007 was made deputy director of the provincial State Assets Commission in 2009; an important and probably lucrative position.)

A further reason for why officials may fear sanctions is that they face strict age limits after which they become ineligible for promotion and career progression is relatively slow even when it proceeds without interruption.⁹⁰ Moreover, the number of available posts that constitute a promotion is quite limited (Kostka and Yu 2015). As Landry (2008) has shown, the age limits are adhered to quite strictly. Receiving a sanction at the wrong moment may thus do longer term damage to one's career if it causes one to miss crucial windows. For example, the head of the Yaodou District in Linfen (尧都区), a county-level position, Su Qingping (宿青平), was about to be promoted to district party secretary in 2002, when a major accident struck, earning him a demerit. This forced the promotion, which had already been announced, to be rescinded. Five years later he had still not moved beyond district head (*Shanxi Youth Daily* 2007).

⁸⁹Meng was made Deputy Party Secretary of the Work Committee on Departments under the CCP Center Committee. In 2012, he became head of a party school belonging to this Work Committee. In terms of power, patronage opportunities, and scope for subsequent promotion these posts are almost certainly substantially less attractive than that of provincial governor. It is notable that of all the individuals to hold this deputy secretary post during the 2000s, Meng was the only one who had previously held a governorship. Ordinarily when their term is up, governors are either rotated to serve as governors in other provinces, or appointed minister, or promoted to provincial party secretary. Xia was made the deputy head of the provincial United Front Office – a position that also almost certainly was less powerful and offered fewer opportunities for patronage, enrichment and promotion than the Linfen Party Secretaryship.

⁹⁰As a central-government official explained, a cadre usually enters the civil service aged 24. It will take him or her at least 10 years to reach the rank of section/village head; making county/division head can easily take a further 15. By that point, the cadre is in his late 40s – but once he passes 55, he will no longer be eligible for further promotion (Interview 44, division-level official).

3.6.3.2 Data Collection

I sought three types of data: the total number of disciplined officials in different years, data on the ranks held by those punished, and on the severity of the punishments. The first were obtained from the chapters on coal-mine safety in individual provinces published in the *China Work Safety Yearbook*. These chapters seem to be written by the provincial authorities themselves, and sometimes contain information on the number of coal-mine accidents investigated, how many individuals were punished for these accidents, as well as the number of sanctions of different types (criminal prosecutions, party and administrative disciplinary sanctions, administrative fines) given. Fortunately, Shanxi and Guizhou reported these data on a more consistent basis than most other provinces, with data available for both provinces for eight years (2003 and 2005–2011). The other data had to be obtained through a much more laborious process; namely searching for reports on sanctions given out for individual accidents. The official reports from the inspection committees are sometimes published in newspapers, on government websites, and in the *Work Safety Yearbooks*. Newspapers also independently report on sanctions given to officials over accidents. To access this material I searched the national and local papers from Shanxi and Guizhou contained in the WiseNews Database. The articles were hand read to extract the information about the sanctioned cadres. Where the information was incomplete, I followed up with Google and Baidu searches to see whether additional information could be obtained. Finally, throughout my research I had compiled a list of all accidents with more than 10 deaths in Shanxi and Guizhou that I came across, and ran Google searches for information about sanctions for all accidents I had not already seen reports on.

3.6.3.3 Accident Patterns and Variation in Disciplinary Sanctions in Guizhou and Shanxi

To set up the analysis, it is helpful to revisit Guizhou and Shanxi's fatality records and accident patterns. Figure 3.16 compares the cumulative number of fatalities in coal-mine accidents and coal output in Shanxi and Guizhou from 1999 to 2011. Table 3.5 further reports the number of deaths and fatal coal-mining accidents in the two provinces in 2003 and 2005 to 2011, as we will use these numbers for the calculations presented in Table 3.6. As is readily apparent, the total number of deaths in Guizhou exceeded that in Shanxi by more than two-thirds, even while cumulative coal production in Shanxi was more than 5 times as much as in Guizhou. However, as Figure 3.17 shows, the accident profile of the two provinces was very different. Guizhou had significantly fewer accidents with more than 19 fatalities than Shanxi (14 versus 52), but more accidents in the 10–19 deaths range (67 versus 48) and significantly more accidents with less than 10 deaths (not shown in the Figure).

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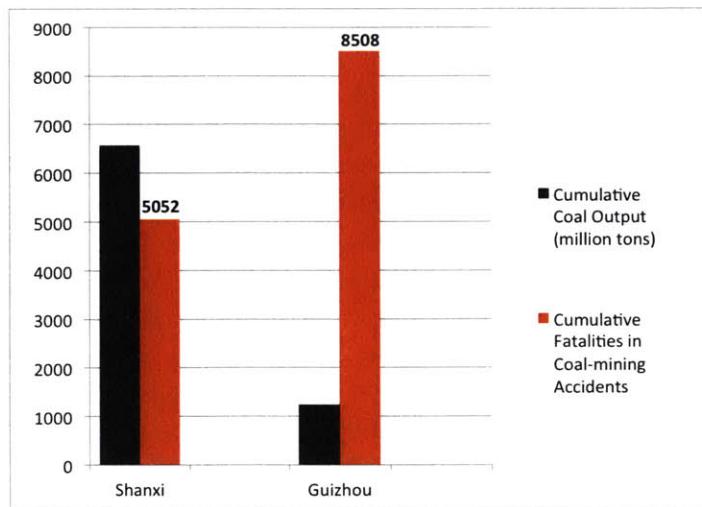


Figure 3.16: Cumulative Fatalities and Coal Output in Shanxi and Guizhou, 1999 to 2011

Source: CCIYB, 2005-2011

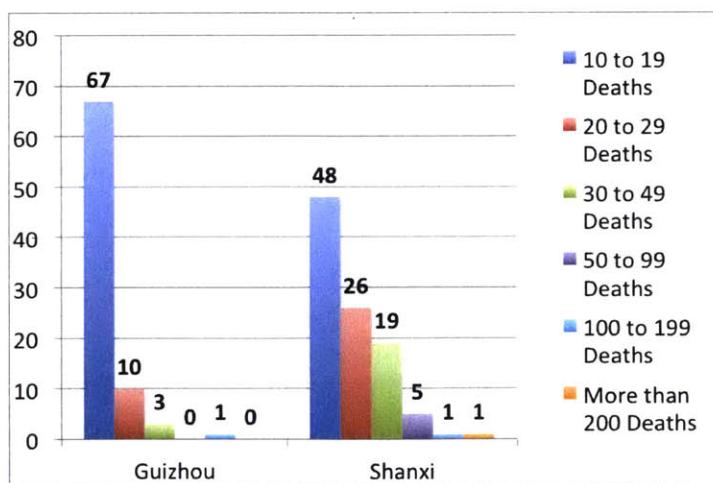


Figure 3.17: Accident Profiles of Shanxi and Guizhou, 1999 - 2011

Source: Safehoo.com, own data compiled from media reports

This led to very different disciplinary outcomes. Table 3.6 presents data on coal-mine accident-related sanctions administered in the two provinces for the years 2003 and 2005

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Province	Fatalities	Accidents
Shanxi	2585	883
Guizhou	4623	2759

Table 3.5: Deaths and Accidents in Coal Mines in Guizhou and Shanxi, 2003 and 2005 - 2011

Sources: CCIYB, 2003, 2005-2011; CWSYB, 2005-2011

to 2011. In total, in Shanxi 8473 individuals were punished over coal-mine accidents. In Guizhou it was around 5740, or 32% less.⁹¹ These figures include large numbers of private-sector actors on whom fines were levied – something authorities in both provinces were probably quite eager to do, since they profited from this. More revealing, therefore, is the number of officials sanctioned. The provinces did not report this directly, but they did report the numbers of individuals who received administrative and party disciplinary sanctions (行政处分、党内处分), the very large majority of whom can be expected to be civil servants.⁹² Both provinces reported this information in the years 2003, 2005 to 2008 and 2010. In these years, in Shanxi approximately 4217 officials were disciplined⁹³; in Guizhou only 1578 – 63% fewer. As the table shows, four

⁹¹Guizhou did not report a figure for the total number of individuals sanctioned in 2007, but it did report figures for the number of coal-mine accidents investigated (312) and the number of individuals who received criminal, party and administrative sanctions (行政处分) (respectively, 83, 222 and 16), but not the number given administrative fines (行政处罚). To impute numbers for the missing values (i.e. for total number of individuals sanctioned and number of individuals given administrative fines), I took the average number of individuals given administrative fines per accident in 2006 and 2008 and multiplied this average with the number of accidents Guizhou reported in 2007. These calculations suggest that about 411 individuals received administrative fines in 2007. Adding these numbers together I arrived at an estimated total number of individuals sanctioned in Guizhou in 2007 (732). This figure is close to the average total number sanctioned in 2006 and 2008 (778) and the average yearly number sanctioned from 2005 to 2011 (765). The “Individuals Punished per Accident and per Fatality” ratios reported in Table 3.6 remained unchanged irrespective of which of these numbers (732, 765 or 778) I used for 2007. To further check the reliability of these ratios, I also recalculated them using only the years where Guizhou reported a figure for the total number of individuals sanctioned (i.e., 2005, 2006 and 2008–2011); again they remained unchanged.

⁹²Administrative fines are basically not given to officials, and the number of officials who were prosecuted was small in both provinces. In 2005 officials were forbidden to own mines. Officials continued to own shares surreptitiously, but it is very unlikely that many full-time mine operator continued to simultaneously hold a government or party position after 2005.

⁹³In 2005, Shanxi disaggregated the total number of individuals sanctioned (1461) into only two figures; administrative fines (551 individuals), and criminal, administrative and party sanctions (910 individuals). To net out the approximate number of criminal sanctions from the latter, I calculated the average percentage that criminal sanctions had made up of the total sanctions in 2006 and 2003 (there

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and a half times as many officials were punished in Shanxi per fatality as in Guizhou, and almost 50% more individuals overall.

Province	All Individuals Punished*	Officials Disciplined**	Individuals Punished per Accident	Individuals Punished per Fatality	Officials Disciplined per Fatality**
Shanxi					
	8473	c. 4217	9.6	3.3	1.8
Guizhou					
	c. 5740	1578	2.1	1.2	0.4

Table 3.6: Sanctions for Coal-mine Accidents in Guizhou and Shanxi, 2003 and 2005 to 2011

*Including criminal punishments, administrative and party disciplinary sanctions, and administrative fines. The numbers rely on an approximation for Guizhou for 2007; see Footnote 99 for details.

**Officials were identified as individuals who received administrative or party sanctions (行政处分、党内处分); comparative data were only available for the years 2003, 2005, 2006, 2007, 2008 and 2010. The numbers rely on an approximation for Shanxi for 2005; see Footnote 101 for details.

Source: CWSYB, 2005-2011, Guizhou Provincial Coalmine Safety Inspectorate (2004), China Mining News (2004). “Sanctions per Fatality” and “per Accident” ratios were calculated using fatality data from CCIYB 2003, 2005-2011

The available data also suggest strongly that not only more officials were sanctioned in Shanxi, but that more officials of relatively high rank were punished in Shanxi than in

were no data for 2004), and then used this percentage to calculate an approximate number of criminal sanctions for 2005 (117), and subtracted this from the overall number for criminal, administrative and party sanctions (the 910). To check the reliability of the result, I repeated this operation, but with calculating criminal sanctions as a percentage of total sanctions for all years for which I have data for Shanxi (2003 and 2006–2010). The result was similar (this approach suggested 97 criminal sanctions in 2005); to be conservative I went with the higher number.

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Guizhou (Table 3.7), and that punishments tended to be more severe (Table 3.8). In total, I was able to identify 428 Shanxi officials and 220 Guizhou officials who worked in party or government posts (i.e., excluding SOE managers) and held at least the rank of deputy section head/deputy village head (副科乡镇级), who were sanctioned over mining accidents between 2000 and 2011. In Shanxi, 44% of these (186 individuals) held the rank of deputy division/deputy county chief (副县处级) or higher, and 8% (33 individuals) held at least the rank of deputy director-general/deputy mayor (副地厅级). In Guizhou, only 57 (26%) held a rank equal or higher to that of deputy county chief and only 3 (1.4%) a rank equal or higher than deputy mayor. In Shanxi, one governor and two vice-governors were sanctioned; in Guizhou, none. Of the Shanxi officials 52% received relatively severe punishments (demotion, dismissal, removal, resignation or prosecution); of the Guizhou officials, only 35% did so. Rather than give officials a formal disciplinary sanction – which is entered into the person’s file and can impact their career in the fashion described above – Guizhou seems to have often just “admonished” (诫勉谈话) officials. In particular, admonitions tended to be used for higher-ranked individuals (county and deputy county leaders). Conversely, Shanxi seems to have basically not used admonitions.⁹⁴ Admonitions are not a punishment (处分) and thus do not bar the individual from promotion. Whether the aggregate figures for sanctioned individuals that Guizhou reported (Table 3.6) include admonitions is unclear. Technically they should not, but statistical sleight of hand of this kind would be hardly unknown in China.

In short, the data presented above suggest strongly that with respect to industrial safety, Guizhou officialdom faced a significantly more lenient disciplinary environment than Shanxi. Documentary materials and interviews also support this. In June 2003 the Guizhou Coalmine Safety Inspectorate itself complained, in a report to the national State Agency for Work Safety, that in Guizhou sanctions for mining accidents were lax. “A few areas” the report stated,

⁹⁴I identified 20 officials in Guizhou who were “admonished”, or 8.3% of the total (240, when the admonitions are counted). In Shanxi, I could identify only 3 cases, or 0.7% (of 431). The point is not that Shanxi admonished so few (quite possibly it admonished more), but that Guizhou felt compelled to publicly report admonitions, while Shanxi did not. A likely explanation for that is that Shanxi had plenty of other cases of officials being given “real” sanctions to report, while Guizhou, it seems, did not.

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Province	Identified Officials (Deputy Section or Higher)	Deputy County or Higher	Deputy Mayor or Higher	Deputy Governor or Governor
Shanxi	428	186 (44%)	33 (8%)	3
Guizhou	220	57 (26%)	3 (1.4%)	0

Table 3.7: Ranks of Identified Officials Sanctioned over Mining Accidents in Shanxi and Guizhou

Province	Officials Demoted, Dismissed, Removed or Prosecuted
Shanxi	224 (52%)
Guizhou	77 (35%)

Table 3.8: Officials Demoted, Dismissed, Removed or Prosecuted in Shanxi and Guizhou

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do not aggressively investigate major accidents. . . . Some local leaders think that the investigations into leaders' administrative responsibilities [foreseen by the official regulations] are too broad and the punishments too severe, and [excessively damage] cadres' promotions. Therefore, when accidents are investigated, [senior cadres'] managerial and leadership responsibilities [for the accidents] are often pushed onto the [low-level staff] with operational responsibility for the accident, or even onto the dead. (Guizhou Provincial Coalmine Safety Inspectorate 2003).

Local coal bosses, too, were let off lightly, and investigations dragged out (*ibid.*). A report from a State Council Work Safety Inspection Group that year was more diplomatic and did not comment directly on the issue of disciplinary sanctions, but it too noted that while provincial leaders in Guizhou took safety very seriously, in the localities this was often not the case: safety measures and policies went ignored, illegal mines continued to produce, and no system of responsibility and accountability for safety (安全生产责任制) was implemented (Li and Liu 2003?).

While two officials from a county-level Coal Industry Bureau (煤炭局) in Guizhou claimed that local leaders felt under real pressure over safety and risked being dismissed if accidents occurred (Interview 60), other interviewees took a different view. A Guizhou journalist claimed that very few local leaders had in fact been disciplined over mining accidents in the provinces (Interview 58). Two Guizhou scholars who work on mining industry-related topics – and in one case had also owned shares in a local mine – also supported this. While pressure on local officials over safety had increased compared to the past, they felt that few had actually been seriously punished over accidents. In comparison with Shanxi, they argued, the pressure over safety was still much lower in Guizhou, because there were few big accidents that attracted public attention (Interview 59). All of these interviewees argued that because Guizhou was still so poor, the main political imperative continued to be development, rather than safety.

By contrast, Shanxi interviewees felt that the pressure over safety on local officials was very real. An official from a municipal Coal Industry Bureau in Shanxi argued that especially after Meng Xuenong was forced to resign as governor because of the kuiba accident, leaders felt under great pressure to solve the safety problem, fearing that major accidents could result in severe sanctions for them, too (Interview 39). A current and a former SOE manager said much the same: pressure over accidents had risen very substantially in the 2000s, and that changed cadres' incentives: while in the past they had been very unwilling to see the private mines closed down or taken over by SOEs, because they earnt large amounts of money from them, the growing risk that accidents posed to their careers had changed this. Now local leaders were much more willing to see this happen (Interviews 37, 38). Strikingly, the already quoted presentation by the Shanxi Coalmine Safety Inspectorate listed “protecting cadres from being held accountable for coalmine accidents” (保护了干部, 让干部远离矿难问责) as one of the

objectives behind nationalizing the coalmines (Huang 2011). (Primary responsibility – including political and leadership responsibility – for accidents in SOEs lay with the SOE leadership, not with the local or even provincial cadres.)

3.6.3.4 Growing Severity over Time?

To what extent does the empirical evidence bear out these interviewees' claim that punishments for mining accidents became more severe over time? Paired comparisons between similarly-sized accidents that occurred in township and village mines in Shanxi in the 1990s and the late 2000s, respectively, do suggest that by the late 2000s sanctions had become stricter, and, perhaps more significantly, that the ranks of those sanctioned had risen. The 1990s saw two accidents with more than 100 deaths in Shanxi; one in Hongdong County (洪洞县) in Linfen City in 1991 (147 deaths) and one in Xinrong District (新荣区) of Datong City (大同) in 1996 (110 deaths). I also have data for an accident costing 65 lives, which occurred in Lüliang (吕梁) in 1992. In all three cases, the highest-ranked officials to be sanctioned were county leaders; a deputy county head (Linfen), a county party secretary (Datong), and a county head (Lüliang). They were given fairly low or even very low sanctions: the Linfen and the Datong man were each given warnings; the Lüliang cadre an administrative offense (Shan 2004: pp. 189, 195, 250f.). The most directly comparable accident to the Linfen and Datong accidents was one that also occurred in a private mine in Hongdong County in Linfen in 2007, with 105 fatalities. This resulted in the Shanxi Vice-Governor being given a warning and the Mayor of Linfen City – a full administrative level above the county – being removed and demoted (Xinhua 2009a). Treatment of smaller accidents also seems to have become stricter. The six accidents costing 40 to 72 lives that occurred in the 2000s that I have sanctions data for – which are roughly comparable to the 1992 Lüliang accident – all saw deputy mayors, mayors or municipal party secretaries being sanctioned, not just county leaders.

To what extent sanctions became stricter over the duration of the 2000s is harder to say. The forced resignation of the Shanxi governor and vice-governor after the 2008 kuiba accident was unprecedented; but so was the accident.⁹⁵ The sanctions for the 2007 Linfen accident were similar to those for a 2005 accident in a private mine in Guangdong, which killed 121. In Guangdong too, the Vice-governor was sanctioned (administrative offense) and the mayor of the municipality demoted (albeit not removed). However, the yearbook data on the total *number* of officials sanctioned in Shanxi and Guizhou that I have already discussed above suggest that irrespective of whether punishments became harsher between the early and the late 2000s, the number of individuals sanctioned per

⁹⁵ At 281 deaths, it was the largest mining accident by far in the 2000s (and 1990s); moreover, most of the dead were not mine workers, who could be said to have taken a conscious and minimally-informed decision to enter a dangerous industry, but ordinary villagers.

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accident and per death grew, especially in Guizhou. Table 3.9 compares the average number of individuals sanctioned in Shanxi and Guizhou, respectively, per accident and per fatality in the early 2000s (the first three years for which I have data; 2003, 2005, 2006) and the late 2000s (the last three years; 2009, 2010, and 2011). In Guizhou the number of individuals sanctioned increased markedly, by about three times. In Shanxi the increase was less marked, but the number of individuals sanctioned per fatality still grew by 60% (from 3 to 4.8).

Province	Individuals per Death		Individuals per Accident	
	Early 2000s*	Late 2000s**	Early 2000s*	Late 2000s**
Shanxi	3	4.8	9.3	10.5
Guizhou	0.8	2.3	1.3	4.2

Table 3.9: Individuals Sanctioned per Accident and per Fatality in the early and the late 2000s (average)

*Early 2000s: the first three years for which I have data; viz. 2003, 2005, 2006

**Late 2000s: the last three years for which I have data; viz. 2009, 2010, 2011

Source: CWSYB, 2005-2011, Guizhou Provincial Coalmine Safety Inspectorate (2004), China Mining News (2004). “Sanctions per Fatality” and “per Accident” ratios were calculated using fatality data from CCIYB 2003, 2005-2011

3.7 Conclusion

This chapter has sought to show that media coverage of mining accidents rose substantially in the 2000s, and that this put substantial political pressures on the state and on provincial and local officials: high levels of public attention and sensationalist reporting turned accidents into stability-threatening “sudden incidents”. The state responded to this in multiple ways: it sought to tighten its control over reporting and its capacity to “channel” public-opinion movements, and it also increased disciplinary sanctions for

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officials when accidents occurred – both to encourage them to take occupational safety seriously, and to demonstrate responsiveness to the public. That in turn increased the pressure on local and provincial officials. However, as we have also seen, these pressures did not affect all provinces equally, but above all Shanxi, on account of, it seems, its many large accidents and the intensive media coverage these attracted.

Aside from tightening controls and increasing disciplinary sanctions, provincial and national policy makers also responded in a third way, namely by pushing forward administrative changes and policy measures that, it was hoped, would lead to a safer coal industry. At the national level, this involved building up an increasingly comprehensive regulatory structure for occupational safety. Most importantly, the bureaucratic power of the State Agency for Work Safety was built up by raising its bureaucratic rank, first, in 2003, to an agency directly under the State Council, then to full ministerial status in 2005. Credible reports connect these elevations directly to the continued occurrence of large accidents; indeed, the final decision over elevation to ministerial rank was apparently taken two days after a major mining accident (*21 CBH* 2005a).

At the provincial level, improving coal-mine safety involved a mix of tightened regulatory oversight and increasingly radical efforts to restructure and consolidate local coal industries, leading ultimately to nationalization in Shanxi and Henan, but not elsewhere. However, even in Shanxi and Henan nationalization was no foregone conclusion. Local governments fiercely resisted any form of restructuring that threatened to eliminate the private sector. Thus, provincial authorities first tried to solve the safety crisis through less radical measures that would largely leave the private sector, and the interests tied to it, in place. Only when these failed did they opt for nationalization. Throughout, large, intensively-covered accidents and the disciplinary sanctions they triggered served as policy catalysts, enabling the adoption of radical measures that would probably not have come about absent this pressure. This is the topic of the next chapters.

Chapter 4

Coal-Industry Change in Five Provinces, *c.* 1995 - 2007. Political Economy and Policy

4.1 Summary of the Argument and Chapter Outline

This chapter traces how coal-industry structures and provincial policy evolved in the five case-study provinces through to 2007. The main point the chapter makes is that although all provinces adopted measures to restructure, consolidate and improve the safety performance of their coal industries in the early and mid-2000s, in none of the provinces studied did the measures taken involve a serious effort to eliminate the private mining sector. Rather, they sought to meet core central-government demands and improve the safety situation while preserving the private mines. Indeed, some of the policies adopted even sought to *strengthen* the private mines' property rights. The chapter relates this to the substantial benefits that the private mines provided local governments with, in form of significantly greater rent-collecting opportunities, tax revenues, employment, and easier governance than SOE ownership of the mines afforded them.

The chapter is divided into three Parts. Part I sets up the analysis contained in the rest of this and the following chapter by describing quantitatively how the industrial structure of coal mining in the five provinces evolved in the 2000s. It shows that by the mid-2000s a large private coal-mining sector developed in all five provinces. After 2008, however, this sector was largely eliminated in Shanxi and Henan, though not in the other provinces.

Part II analyzes the relationship between the private mine owners, the local governments, and the large provincial and central SOEs. It is crucial to understand this political economy, for otherwise it becomes impossible to explain why coal-industry restructuring played out as it did, with all provinces at first trying to solve the accident problem while simultaneously preserving the private sector, and only those provinces adopting nationalization where the initial private sector-preserving measures failed to stop the frequent occurrence of big, intensively covered accidents that triggered ever-sharper disciplinary sanctions. Aside from the mine owners themselves, the constituency most vehemently opposed to SOEs taking over the private coal mines were local (sub-provincial) officials. Part II explains why. Local officials could siphon off large amounts of rent from the private mines, but they could not do so from the provincial and central SOEs. Besides providing a large flow of semi-legal and illegal "fees", "donations", bribes and dividends (via illegal shareholding by officials) that I collectively refer to as "rent", quirks of the tax system meant that privates also tended to pay substantially more tax locally than the SOEs. Local governments also found privates easier to control than SOEs (which made local governance easier, for instance when mining operations led to conflicts with residents), and they tended to generate more employment locally.

Part II analyzes the reasons for this. Local governments held overwhelming *de facto* power over the private sector. Furthermore, the peculiar pattern of private-sector development in China's coal industry had systematically forced privates into opaque and

informal ownership structures. Therefore, their hold over their mines was structurally insecure and they were dependent on cultivating clientalistic ties with local officials to secure their ownership of their mines. Conversely, the power balance between local governments and the provincial and central SOEs was more equal, or even slanted in favor of the SOEs, reducing officials' scope to siphon off rent and generally boss the SOEs about.

Part II also comments on the consequences that private owners' lack of investment security had for how they operated mines, for this helps to explain why the provinces adopted some of the policy measures discussed in Part III. It appears that to maximize their gains and minimize their risks, they tended to pursue short-term, speculative and investment-light strategies. It is likely that this was one of the reasons for the severity of the safety, pollution and coal-reserve-destruction problems in the private sector, and it helps account for the perception widespread in Chinese officialdom at the central and provincial levels that the private sector was of "low quality" (素质低) and could not be trusted to operate coal mines.

Part III turns to the policies that the case-study provinces adopted towards the coal industry in the years up to 2008. From about 2003 onwards, all the case-study provinces began tightening governmental control over the industry. The position of the large, provincially-owned state mines in the provincial coal industries was strengthened, the regulatory regime that the private mines were subject to was tightened but also reformed to increase their security of property rights, and an initial round of structural adjustment (consolidation of the TVM sector) was forced on the industry. This was a response both to the growing safety crisis and the publication, in 2005 and 2006, of a more detailed industrial policy for the coal industry by the Center (cf. Chapter 2), which was itself at least in part a response to the growing political salience of the accident problem. However, beyond occasional calls for provincial SOEs to take over private mines – which were mostly *not* acted upon – no serious steps were taken in these years to nationalize, close or otherwise eliminate the private sector. In other words, the measures adopted basically respected local governments' extractive interests vis-à-vis the local private coal industries. I therefore speak of rent-preserving change, in contradistinction to the rent-destroying change (nationalization) that took place in Shanxi and Henan after 2008.

Part I Changing Industrial Structures in Five Provincial Coal Industries

4.2 Shifting Ownership Structures

4.2.1 Shifting Ownership Structure

Figures 4.1 to 4.5 show coal production from mines of different ownership types in each of the five provinces. China has traditionally reported coal production in terms of output from three separate categories of mines; Key State Mines (国有重点煤矿; the large provincially- and centrally-owned enterprises), Local State Mines (国有地方煤矿, which are mainly county- and municipally-owned) and Township and Village Mines (乡镇煤矿). The latter sector was originally supposed to be mainly collectively owned, but by the 1990s had become near-wholly private. In the late 2000s, provinces began switching to a twofold classification system of Key State Mines and “Local Mines” (地方煤矿). The latter category reported, as a single , the sum of TVM and local-state mine production, making that category systematically intransparent with respect to ownership. This opacity was almost certainly one reason for its adoption.

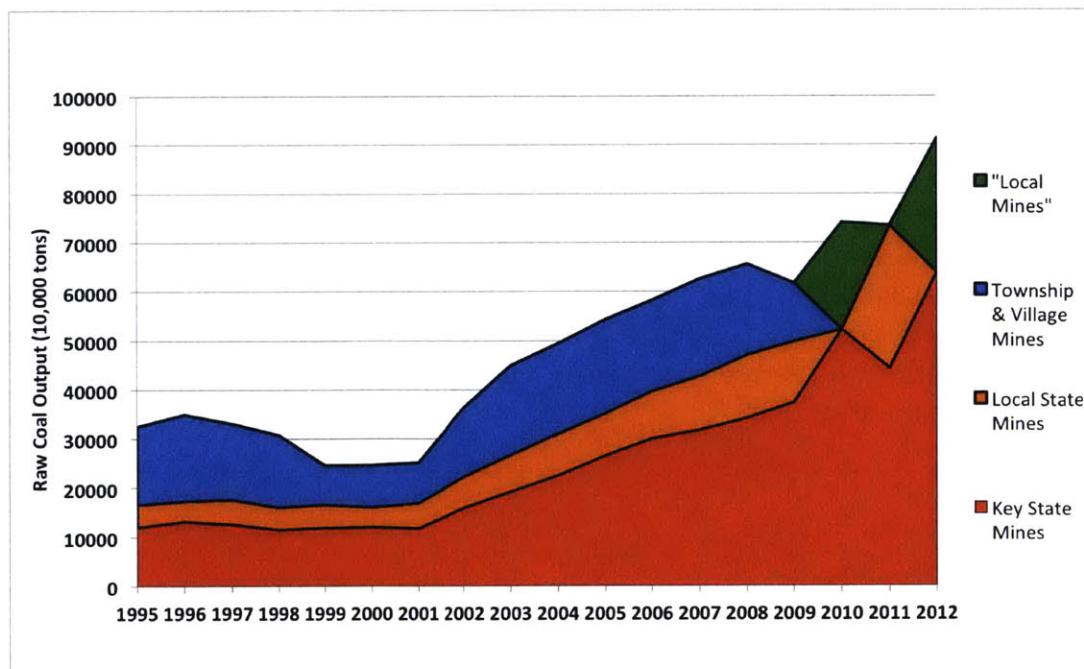


Figure 4.1: Coal Production in Shanxi, 1995 - 2012

Source: CCIYB, 1996 - 2012

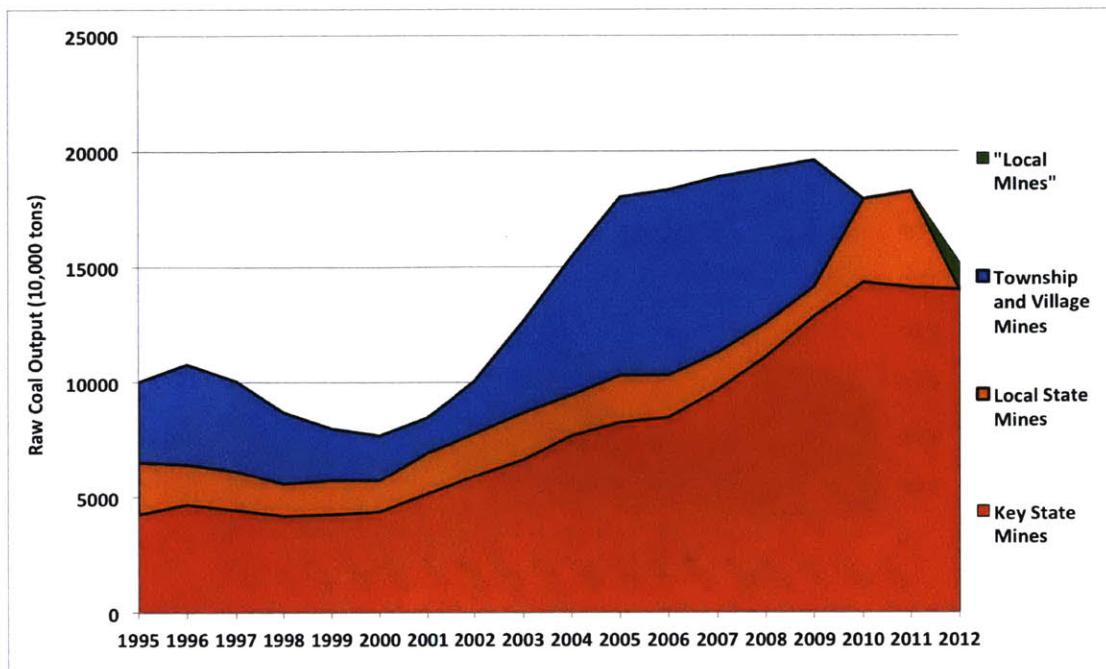


Figure 4.2: Coal Production in Henan, 1995 - 2012

Source: CCIYB, 1996 - 2012

China's coal statistics are notoriously unreliable.¹ In the past decade, the National Bureau of Statistics has repeatedly recalculated the s for total production and consumption,², without however disaggregating the recalculated national s to the provincial level. This means that for our purposes the data from the official *China Coal Industry Yearbooks* – which disaggregate output by province and ownership and are produced by the State Coal-mine [Work] Safety Inspectorate (国家煤矿安全监察局) – are usually the best available. For Inner Mongolia and for Shanxi I have been able to obtain some

¹For detailed discussion of the problems of data distortion see Appendix.

²Most recently (Fall 2015), NBS statisticians estimated that total consumption since 2005 had been about 17% higher than originally reported (New York Times 2015). Since imports are the part of the coal system where data are most reliable, it is likely that much or all of this additional consumption was met with domestic production.

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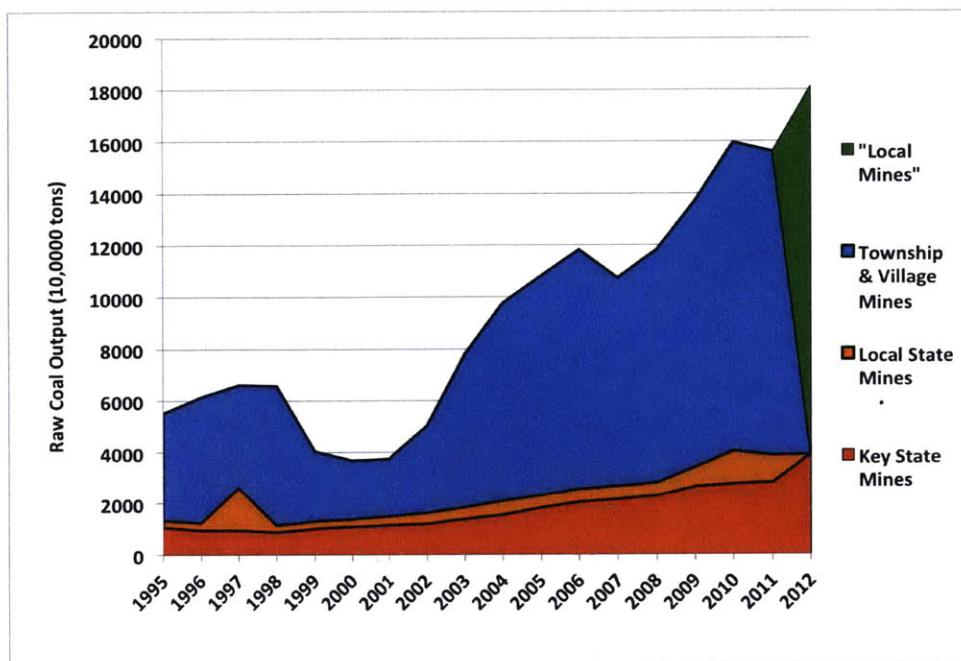


Figure 4.3: Coal Production in Guizhou, 1995 - 2012

Source: CCIYB, 1996 - 2012

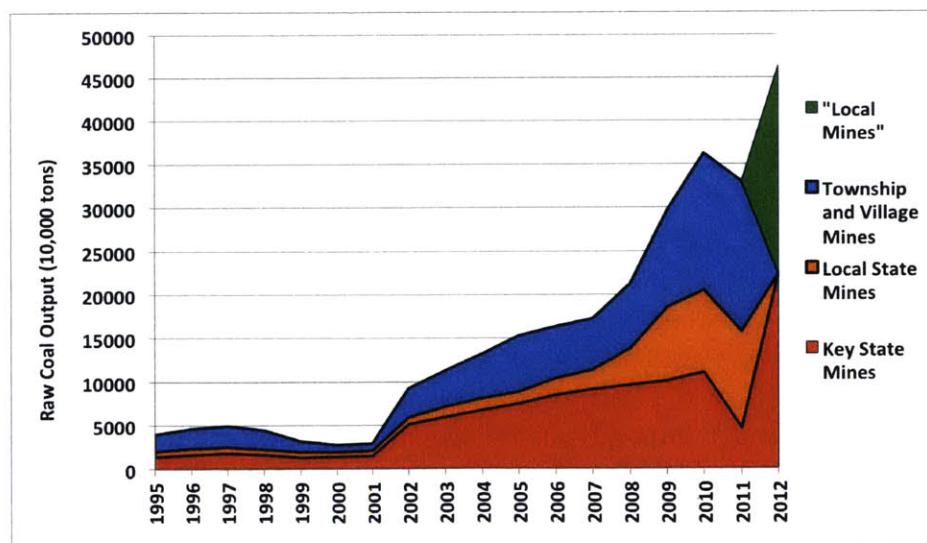


Figure 4.4: Coal Production in Shaanxi, 1995 - 2012

Source: CCIYB, 1996 - 2012

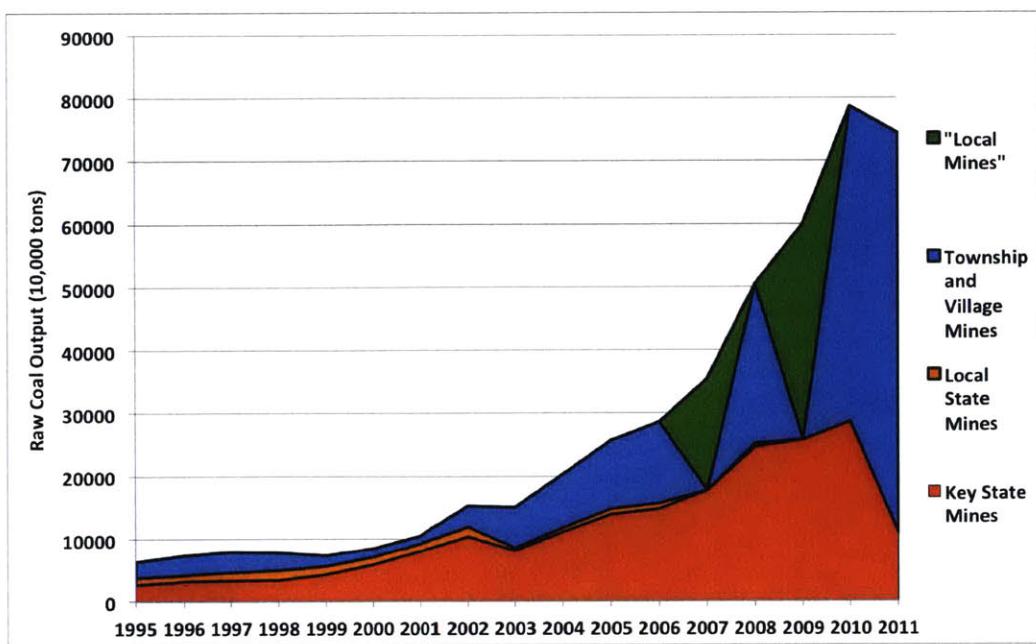


Figure 4.5: Coal Production in Inner Mongolia, 1995 - 2011 (Coal Industry Yearbook Data)

Source: CCIYB, 1996 - 2011. No data for IMAR was reported in the 2012 Yearbook.

additional data from their *provincial* coal-mine safety inspectorates. While the Shanxi inspectorate's data track different categories than the yearbook data, the two are basically consistent. In the case of Inner Mongolia, however, the inconsistencies between the two data sources are fairly substantial. As I have no basis on which to judge which is the more accurate, I present both.³ Crucially however, despite their inconsistencies, both data sources still tell broadly the same story about Inner Mongolia (namely that a substantial private sector remained in existence), and it are these *broad trends* – nationalization in Shanxi and Henan, preservation of substantial private sectors in the other provinces – that one should focus on in the data, especially as these also correspond to how industry change was described in other sources (interviews, media reports, state documents).

As explained in Chapter 2, China began liberalizing coal production and sales in 1983, prompting mass entry by rural entrepreneurs, farmers and village collectives. As we

³The Inner Mongolian safety inspectorate was presumably closer to the ground to events in IMAR. However, it always published its data about 12 months before the yearbook produced by the national-level safety inspectorate was released, meaning that the compilers of the yearbook should have had full access to the provincial inspectorate's data. But evidently they discounted or recalculated it. It is notable that the picture presented by the yearbook (i.e. by the national inspectorate) was at least potentially more politically problematic (for Inner Mongolia) than the data and picture presented by the Inner Mongolians themselves, since the latter reported a far smaller private/TVM sector than the yearbook data did.

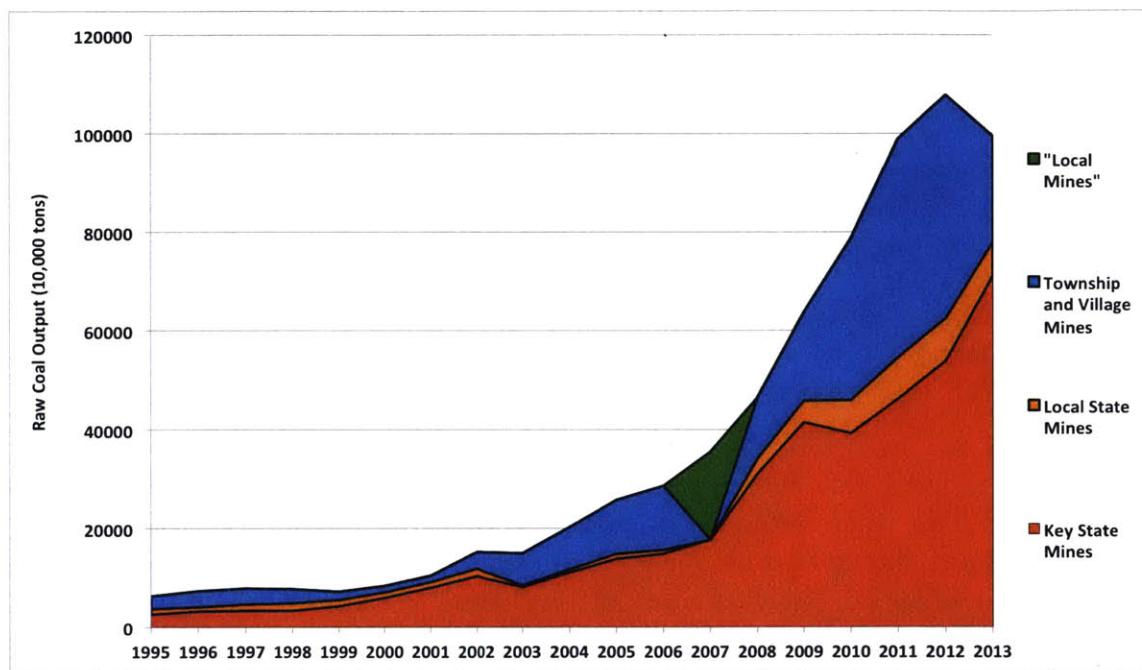


Figure 4.6: Coal Production in Inner Mongolia, 1995 - 2013 (Provincial Coalmine Safety Inspectorate Data post-2007)

Sources: CCIYB, 1996-2007 for the years 1995 to 2007; Inner Mongolia Coalmine Safety Inspectorate “Inner Mongolia Coalmine Safety Monthly Reports” (内蒙古煤矿安全月报) for the years 2008 to 2013

can see in the figures, by 1995 a large TVM (private) sector existed in each province, producing between 75% (Guizhou) and 40% (Henan) of total output. The 1998 to 2001 closure campaign temporarily led to a big drop in *reported*⁴ TVM production. This can be seen in all five provinces, but is most clearly visible in the figures for Guizhou, Shanxi, and Henan. After 2002 TVM output soared again in all provinces. Output from Key State Mines also grew steeply in the 2000s, especially in Shanxi, Henan, and Inner Mongolia, while output growth from Local State Mines was more restrained.⁵ But by 2011 significant structural divergences had come about. In Shanxi and Henan TVM output collapsed after 2009 as most privates were taken over by state mines and no TVM production whatsoever was reported after 2010. In fact, as we will see, private ownership and production did not disappear *completely* in these provinces, but it was dramatically reduced. Here, the “local mine” production reported in 2010 and 2012 largely reflects output from local state mines. Conversely, in the other provinces the private sector persisted and even continued to grow in absolute and/or relative terms.

According to the yearbook data, in 2011 the private (TVM) sector in Guizhou, Inner Mongolia and Shaanxi accounted for 75%, 85% and 52% of production in 2011, respectively. The very large “local mine” production reported in the yearbooks for Guizhou and Shaanxi in 2012 (and for in Inner Mongolia in 2007 and 2009) also reflected basically private production, as can be seen from the fact that the size of “local mine” output in these years is roughly the same as TVM output in the foregoing and following years in these provinces. According to the Inner Mongolian Coal-mine Work-Safety Inspectorate, the private (TVM) sector was smaller, but nevertheless accounted for a still sizeable 45% in 2011 and 42% in 2012.

As will be discussed in Chapter 5, there are indications that from 2013 on – and gathering speed in 2014 and 2015 – industry structure may have begun to change rather dramatically also in Shaanxi and Inner Mongolia (probably less so in Guizhou) – but as a result of falling coal prices, not government policy. Coal prices began declining in the autumn of 2011 and by summer 2012 they were in free fall, a collapse that has continued through to the present day (cf. Figure 4.12 below). Of all the case-study provinces this hit Shaanxi and Inner Mongolia hardest, because the centers of their coal industry – northern Shaanxi and western Inner Mongolia – were the furthest away from the major coal/power-consuming areas in eastern and southern China, meaning that they faced the highest transport costs. In Inner Mongolia and Shaanxi, this in turn hit private mines harder than state mines, because they depended heavily on trucking to transport their coal to market, having least access to the (lower-cost, but centrally- and provincially-controlled) railway system. Media reports indicate that by fall/winter

⁴The drop in TVM output in the years 1998 to 2001 probably mainly reflects underreporting of output, not any real decrease (Wright 2007, Tu 2011).

⁵It is unclear why output from local state mines grew so slowly. One possibility is that local officials realized that a private mining sector allowed them benefit from industry profitability via rent extraction, without exposing them to downside risks. The slow growth may however also be an artifact of – probably extensive – privatizations of local state mines in the 1990s.

2012 private Shaanxi and Inner Mongolian producers had therefore begun to shutter production *en masse*, something indicated also by the drop in private coal output in 2013 recorded in the data from the Inner Mongolian safety inspectorate. As coal prices have only dropped further since then, it is likely that this trend has only continued.

The nationalizations in Shanxi and Henan attracted considerable public interest, extensive media coverage, and volatile protests from expropriated businessmen and liberal intellectuals and journalists. This makes it very unlikely that the nationalization and disappearance of TVM production from the statistics simply reflects data falsification by local authorities, in the way the reported drop in TVM production in 1998–2001 did. The central state moreover evidently accepted the claims of Shanxi and Henan, since in 2013 and 2014 NDRC documents setting out targets for the closure of small mines in other provinces recorded that Shanxi and Henan had “basically completed the elimination of backward small mines” (State Energy Bureau 2013, 2014)⁶. By contrast, already in the early 2000s state authorities openly admitted that the 1998–2001 campaign had failed.

While the output data capture the basic trend relatively clearly, the numbers published after 2010 are increasingly politicized, especially for Shanxi. Shanxi had initially responded to the protests about nationalization by simply denying that it was happening at all. What was taking place in Shanxi, provincial officials claimed, was not “the state advancing and the private sector retreating” (国进民退) as critics alleged, but “the excellent advancing and the inferior retreating” (优进劣退). Shanxi officials claimed that far from nationalizing the industry, the restructuring they were implementing would result in only 19% of the industry being state-owned while 28% would remain in private ownership, with the remaining 53% under “mixed ownership mostly based on the shareholding system” (以股份制为主要形式的混合所有制) (e.g. Ren 2010, Ji 2010).⁷ As a senior individual close to the Shanxi Development and Reform Commission admitted to me, this claim was entirely bogus (Interview 33), something confirmed by data from an internal Power Point presentation by the Shanxi Work Safety Inspectorate discussed in the next paragraph but one.⁸

⁶The TVM/private mine sector was largely coterminous with the “backward” small-mine sector Cf. Chapter 2.

⁷Note that these claims never specified what these percentages referred to – output, registered capacity, mine or firm numbers, revenue/market share, or something else.

⁸The Power Point presentation repeats the claim that the ownership structure after the industry’s “merger and reorganization” (兼并重组, the phrase commonly used to describe the restructuring/nationalization that took place in 2009–2010) was 3 : 2 : 5 private : state-owned : mixed. (Huang 2011: Slide 14). At first sight this is bizarre because the numbers reported in the presentation bear no relation to this ratio. It is slightly less bizarre when we realize that within the Chinese statistical system the category “state-owned” (国有) often refers only to a specific kind of state-ownership (traditional SOEs) not to all forms of state ownership. A company can be majority state-owned or even *entirely* state-owned (in the sense that all its shareholders are state units), but, depending on how this state ownership is structured, still end up being classified as, for instance, a “shareholding company”. (Cf. Huang 2008: pp. 13–19).

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Probably because of the controversy the nationalizations had triggered (and perhaps because of the unsupportable but widely publicized claim by Shanxi officials that privates continued to make up 30% of the coal industry) Shanxi in the 2010 and 2012 yearbooks began reporting output only in terms of production from Key State and from “Local” Mines. The latter category had already been used by Inner Mongolia in 2007 and 2009, probably also for political reasons.⁹ For reasons that are unclear, Shanxi and Inner Mongolia briefly switched back to the old threefold classification in the 2010 and 2011 yearbooks, but by 2014 (when the 2012 yearbook was published) the “local mines” category began being adopted by other provinces as well.

The Shanxi Work Safety Inspectorate PowerPoint slides provide the most detailed and probably reliable data on the changing composition of the province’s coal industry. As can be seen in Table 4.1, once the nationalization and restructuring had been completed in 2011, 1053 mines remained, down from 2598 in 2008. Of these, 188 were in private ownership, down from about 2300 in 2008. The number of firms fell from 2200 (of which about 2000 were private firms) to 130, of which 59 were private.

Year	Mines		Firms	
	Total	Private	Total	Private
2008	2598	c. 2300*	2200	c. 2000*
2011	1053	188	130	59

Table 4.1: Number of Coal Mines and Coal Companies in Shanxi, 2008 and 2011

*Author estimates

Source: Huang 2011

The slides also provide data on registered mining capacity. Figures 4.7 and 4.8 compares the 2011 data from the slides to data from 2006, which is the last pre-nationalization

⁹According to one Chinese scholar, the China National Coal Association (a quasi-state institution that together with the Work Safety Inspectorate is responsible for collecting most of China’s coal statistics) had for a long time wanted to get rid of the old ownership-based classification system for describing coal output, on the grounds that these categories were increasingly outdated. However, according to this interviewee, the fundamental reason was that ownership-based categories were politically inconvenient and always liable to create controversy of some kind. Given the TVM sector’s connotations of backward, corrupt and chaotic mining practices and the Center’s longstanding desire to get rid of it, no province was keen to declare massive TVM production, and this explained why Inner Mongolia had begun reporting this as “local mine” output. Conversely, in the context of Shanxi’s industry reorganization, the abrupt reduction of TVM output was inconvenient given the media polemics about “the advance of the state and the retreat of the private sector” (Interview 8).

year for which I could obtain information on mining capacity for Shanxi. In 2006, private (township and village) mines accounted for 47% of Shanxi's registered mining capacity, and state mines for 53%. By 2011, state mines made up 84%, with the large provincially- and centrally-owned Key State Mines accounting for the bulk of the increase. Privates only still controlled 16% of Shanxi's coal-mining capacity. Total private and local-state mining capacity came to 35%, which is close to the share of actual production Shanxi's "local mines" accounted for in 2010 and 2012.¹⁰

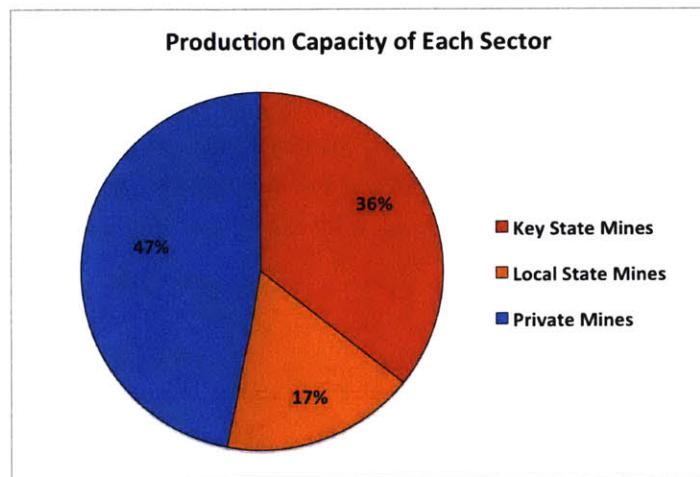


Figure 4.7: Structure of Shanxi's Coal Industry by Production Capacity, 2006

Source: CCIYB, 2006

I was unable to come by equally precise data for Henan, but the output data combined with contextual information (presented in the next Chapter) tell a fairly clear story: the private sector essentially vanished, as most firms were forcibly taken over by provincial and local SOEs.¹¹ Conversely, contextual information leaves little doubt that the "local mine" output reported by Guizhou and Shaanxi in 2012 was in fact production from private mines. (No output data were published for Inner Mongolia for 2012.)

¹⁰It is also close to the share of production logged as "local state mine" production in 2011, suggesting that that number may (in 2011) in fact include both local-state and private output. Confusion of this kind would not be unusual in China's coal statistics.

¹¹It is unclear what caused the drop in local-state/local mine production in 2012 relative to 2011 in Henan; one possibility is that it reflects a reaction to coal demand, which had begun falling sharply by 2012.

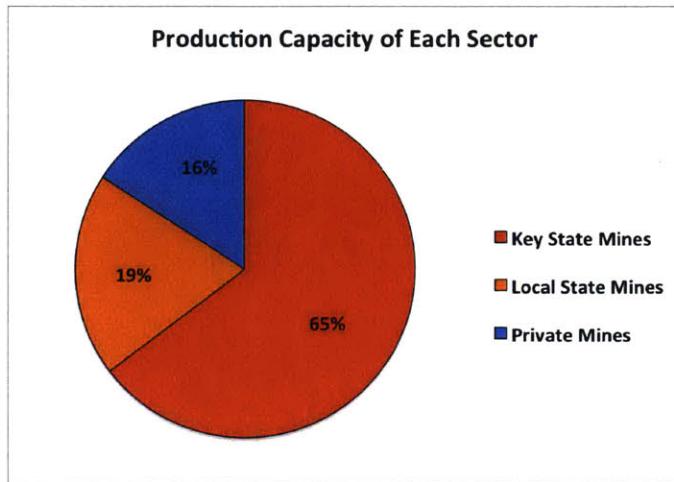


Figure 4.8: Structure of Shanxi's Coal Industry by Production Capacity, 2011

Source: Huang 2011

4.3 Increasing Consolidation

While ownership structures between provinces thus diverged, industrial structure in other respects underwent similar changes. Specifically, in all case-study provinces significant industry consolidation took place as large numbers of mines were closed or merged during the 2000s. Figure 4.9 captures this process by providing information on the (rough) number of mines in each province.

Data on mine numbers are only published irregularly and had to be pieced together from disparate sources. The numbers are also prone to error and distortions as many private mines were repeatedly “closed” during the 2000s only to reopen later, and tracking the precise number of small and micro-scale mines was difficult even for local authorities. For instance, while Shanxi reported about 6500 mines in 1997, a local scholar estimated that there were at least 10,000 mines operating in the province in the late 1990s (Interview 35).¹² Moreover, the reported numbers do not necessarily capture “illegal” (非法) mines that lacked permits. For instance, Shanxi governor Yu Youjun claimed that in 2005, in addition to the roughly 5000 legal mines, there were a further 4800-odd mines operating illegally in Shanxi (21 CBH 2006a). Despite these problems, the available numbers do suggest a common trend which, as we will see, is moreover in line with the evidence from the “qualitative” sources: in all provinces, mine numbers fell steadily, from usually several thousand in the 1990s and early 2000s to mostly just several hundred by the late 2000s. The available sources also show that these reductions

¹²Economists from the Shanxi Academy of Social Sciences

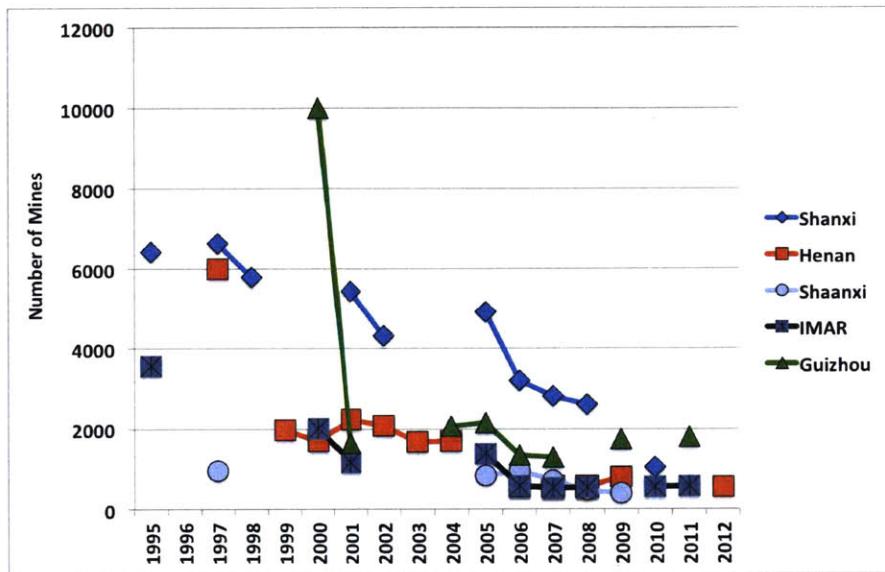


Figure 4.9: Declining Mine Numbers in the Case-Study Provinces, 1995 - 2012

Note: The number for Guizhou for the year 2000 is an estimate from an interviewee (see Sources), and includes artisanal mines, which accounted for about 70 to 80% of the total. The numbers for Guizhou for all other years do **not** include the artisanal sector, which in any case seems to have been largely closed down in the mid-2000s (cf. Section 4.9).

Sources: CCIYB, SAWS (2006), Interview 56 (senior engineer from Guizhou coal research institution), Cao 2010, Chen (2012), Guizhou (2006b), Guizhou (2011), Guizhou Province Land and Resources Bureau (2011), IMAR (2011). When different sources gave different mine numbers for the same year I used the latest published source because it seems more likely that the numbers became more rather than less accurate over time. When sources from the same year gave different numbers, I used the higher number, since the sources - all of which are official - are more likely to have an incentive to underreport rather than exaggerate mine numbers.

came about almost exclusively through the closure of private mines/TVMs (cf. CCIYB 2002-2008). The partial exception to this trend is Guizhou, which did radically reduce the number of artisanal micro-scale mines (see next paragraph), but otherwise seems to have done relatively little to reduce TVM numbers: *excluding the artisanal sector*, state and township and village mines in the province numbered about 1650 in 2001, and about 1800 in 2011.

Up to the early 2000s artisanal mines operated by peasants in the off-season to produce coal for local use (民用) probably existed in most locales where coal seams were shallow enough to make mining with basic hand tools feasible. This was the case especially in Guizhou, and probably also in parts of northern and southern Shaanxi and Western Inner Mongolia. Guizhou in particular encouraged this sector in the 1980s and 1990s to alleviate poverty (Donaldson 2011). One engineer from a Guizhou coal-mining research institute estimated that in 2000 around 10,000 such mines were operating in the province, though reliable numbers are hard to come by as these mines – which rarely produced more than a few thousand tons of coal – were almost never entered into the statistical tables (Interview 56).¹³ From the early to mid-2000s on, however, Guizhou began closing these mines aggressively, as did the other provinces, something we turn to further in Section 4.9.

¹³Contemporary newspaper reports support this picture of thousands of artisanal mines operating across the province. For example *Guiyang Metropolitan Daily* (2003) claimed that in 1999, 2700 mines were closed in Liupanshui (六盘水行政区) prefecture alone, and *Southern Metropolis Daily* (2006) reported that in 2004 Xingren County (兴仁县) dynamited 1133 small mines.

Part II The Political Economy of Private Coal Mining in China in the 1990s and 2000s

This Part begins by analyzing local officials' scope to extract rent from the private mines. I show that while systematic data are scarce, the available evidence very strongly suggests that local officials were able to siphon off very large sums from the private mines (Section 4.4.1), and examine why this was so. One reason was the raw power they held over all but the most connected mine owners: because most day-to-day regulation as well as the implementation of larger state policies (e.g. consolidation) was handled by local officials, they both could shut mines down at will, and practice generous forbearance towards operators, allowing them to mine in lucrative but illegal ways (Section 4.4.2).

Officials' power was further reinforced by the weak legal-institutional foundations on which owners' control of their mines often rested, which was a result of the way that the private mining sector had developed historically. Up to the mid-2000s, mining licenses and concessions seem to have often been issued in informal ways that provided only limited legal clarity and security (Section 4.5.1). Furthermore, prior to institutional reforms in the mid-2000s, the political-legal status and permissibility of private ownership and exploitation of coal reserves remained thoroughly uncertain. Therefore, formal ownership rights appear to have often been structured in deliberately ambiguous and opaque ways (Section 4.5.2). This insecurity had several consequences (Section 4.5.3). For one, it reinforced clientelism, as the absence of secure property rights further encouraged mine owners to cultivate protective exchange relations with officials, since legal claims could not be depended on. Secondly, it incentivized investors to operate their mines in short-term and speculative ways that minimized fixed-asset investment. This reduced their risks, but it also probably exacerbated the problems of the sector, like accidents.

Section 4.6 analyzes the relationship between local governments and the provincially and centrally-owned SOEs. I show that while SOE ownership of the coal industry *also* held some advantages for local authorities, like better mine safety (Section 4.6.2), overall local governments seem to have felt that these were outweighed by the disadvantages created by SOE ownership of the local coal industry (less control over mining operations, lower employment effects, and above all lower tax and rent flows) (Section 4.6.1). The section relates this to the more equal power balance between the SOEs and the local governments, and aspects of the tax system.

4.4 State Power and Local Government Rent Extraction

4.4.1 Modes and Scale of Rent Extraction

I use the term “rent extraction” to refer to the ability of local-state entities (e.g. government bureaus) and individual officials to siphon off large sums of money from the coal mines through channels other than the formal taxation system, in return for permitting them to operate and without providing a legitimate service in return (e.g. inputs like water or electricity). Not all of the mechanisms by which this proceeded were illegal – some were implicitly sanctioned by the Center – but they all took place through institutions and processes defined and controlled by local officials, not central (or provincial) state regulation, and rested ultimately on the threat of closure or some other retaliation if owners did not pay up.

The most common processes through which extraction by state entities seems to have proceeded was levying “fees” (费) and “fines” (罚款), and soliciting “charitable donations” (慈善捐款). As Eun Kyong Choi has noted, fees (and fines) in China are a kind of “quasi-tax”, not a user-charge. Unlike taxes (税), whose height and division between levels of government is precisely stipulated, local-state authorities have wide discretion to set (invent) fees and fee schedules. What makes them particularly attractive is that revenue from fees generally does not need to be shared with higher levels of government. While fees in theory must be approved by central or provincial authorities, in practice this requirement is widely ignored (Choi 2009: pp. 80, 84f.; Interview 58, 88¹⁴). As a senior tax-bureau official noted, while firms could in principle sue if they had been coerced into paying, in practice they had few incentives to do so, and without action by the firm there was little the Center could do (Interview 61). “Charitable donations” functioned in much the same way as fees: local authorities would simply set a fundraising target or define a purpose for which moneys were to be raised, and then “invite” local firms to contribute. While “donations” and “fees” were to some extent “universal” payments (i.e., they were charged of most or all firms active at given time and place), individual payments by single firms to a particular office of course also occurred. For example, coal boss Meng Zhaokang (孟昭康), a former local official who owned mines in Xiaoyi (孝义), a county-level city in Shanxi, and was for a time the richest man in the area, gave large sums of money to various bureaus in Xiaoyi and Lüliang Prefecture (吕梁) by purchasing old buildings from them at inflated prices (*Caijing* 2003).

For obvious reasons little systematic information is available on the true amount of money extracted through these channels. Anecdotal information though consistently suggests that it was on a grand scale. The just-mentioned case of Meng Zhaokan seems to have involved payments of up to RMB 35 million. In Datong (大同), Shanxi,

¹⁴Guizhou journalist with close links to the coal trade (58); Shanxi journalist (88). Interviewee 88 claimed that fees did not even require provincial approval, but only that of the local People’s Congress.

mining enterprises paid around 40 separate fees (Interview 88¹⁵). Not all fees had even a nominal link to the coal business. In some locales in Guizhou, coal firms paid an “education fee” (教育费) (Interview 58¹⁶). One Guizhou coal boss estimated that he spent at least 10% of profits every month on fees and “building relationships” (用于交费和打点各种关系) (*Southern Weekend* 2007b). In 2009/2010, the government of Xinmi County (新密) in Henan ordered local mines pay an additional ad-hoc “contribution” (贡献) of RMB 20 million on top of their regular tax burden (*Caijing* 2010d). In 2011, Shenmu (神木) county in northern Shaanxi county obtained commitments from local enterprises to donate RMB 3.8 billion over the *Twelfth Five-Year Plan* period (*Caijing* 2011), while neighboring Fugu county (府谷) raised at least RMB 1.3 billion in donations from 2007 to 2010 (*Chinese Business View* 2011, *EO* 2012b). In the counties of one Shanxi municipality, the TVMs were expected to provide the local governments with between RMB 5 and 30 million annually over and above the regular taxation (税) to fund “public projects” (公共事业) (Zhao and Chen 2013). Testimony of this kind about the scale of informal extraction from the private mines could easily be multiplied, and we will encounter further evidence for it at later points in this thesis.

In part, these moneys were used to fund legitimate state activities. Shenmu and Fugu in particular ploughed large sums raised through “donations” into providing free health care and education for local residents as well as social security payments. But it seems that often these ad-hoc levies on mine owners were used for what may be best described as conspicuous government consumption. When the Linfen City Public Security Bureau wanted to construct a new administrative building, it sent its staff out to collect “fines” from coal bosses. Everyone was given a collection target, including staff from offices entirely unrelated to mining. Over RMB 100 million was thus raised. Fine collecting was only reigned in after someone deposited a package of explosives in the Bureau’s court-yard (*Oriental Outlook* 2008). In 2003 in Xingren County (兴仁), Guizhou, the county head financed a large cultural festival with “voluntary” donations from mines (*Southern Metropolis Daily* 2006), while back in Linfen Prefecture, a county head obliged local mines to “donate” (捐) up to several million yuan each to finance the construction of a replica of Tian'anmen as well as what is apparently the world's tallest ceremonial gate complex (Sun 2004?) (Figure 4.10).

Extraction by individual officials proceeded in similar ways. Much probably took place through bribes, especially when licenses had to be obtained or renewed, or in the context of “handling” (处理) accidents. Thus the former Head of the Henan Coal Mine Safety Inspectorate amassed at least RMB 19 million in bribes over an eight-year period in the mid-2000s (*Caixin Online* 2010). But probably even more prevalent was stockholding by officials and their relatives in mines. In 2005 this was made illegal and cadres

¹⁵Shanxi journalist

¹⁶Guizhou journalist with close links to the coal trade

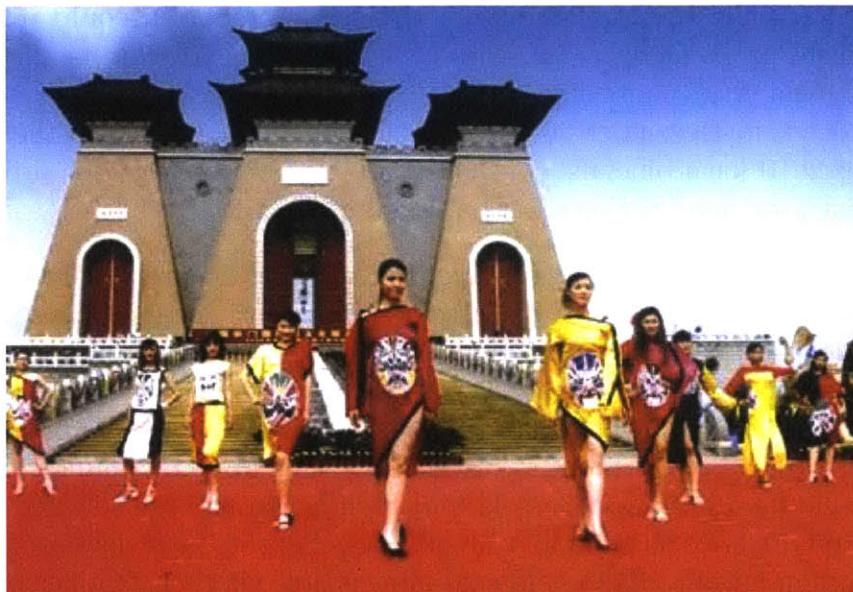


Figure 4.10: Conspicuous Government Consumption: Ceremonial Gate And Tian'anmen Replica in a Linfen County
Source: Boxun (2007)

were required to declare and divest their holdings. However, the amounts ultimately disclosed were minute. Nationwide, officials only declared RMB 650 million in coal-mine investments (*21 CBH* 2005b). In Shanxi, officials declared only RMB 23 million (*CYD* 2005b). For comparison, by the late 2000s medium-sized mines in Shanxi and Shaanxi sold for up to several hundred million RMB (*21 CBH* 2009, *China Newsweek* 2010, Interview 3¹⁷). While the low figures for divestment reported could reflect coverage restrictions from propaganda authorities concerned about disclosing the true scale of official enrichment, it is more likely that they simply reflect a failure to declare full holdings. Indeed, in December 2008 Henan felt obliged to reiterate the ban (*Caijing* 2008), and in 2010 local officials' continued holdings were one factor prompting them to try to resist provincial nationalization orders (*EO* 2010a).

Numerous cases of officials' owning stock in private mines via proxies or via their families were also disclosed in Shanxi in the course of several anti-corruption campaigns begun after 2008. Most dramatically, allegations emerged in 2015 that a former Shanxi Party Secretary held shares in a company that owned one of the province's most valuable coal concessions (*Caijing* 2015). But much more lowly officials, too, could profit handsomely from the coal boom. Thus the head of the Coal Bureau of Pu county (蒲县), also in Shanxi, and his family amassed assets and cash worth several hundred million *yuan* (*PD* 2010). In Guizhou, Shaanxi and Inner Mongolia, too, interviewees claimed that it was very common for officials to hold coal-mine shares via their families or friends, and several cases were disclosed during anti-corruption campaigns (e.g. *The Beijing News* 2013, *Economic Information* 2014; cf. CCP Guizhou Party Committee and People's Government 2005, *CYD* 2011c). In an interview in 2007, the head of the State Work Safety Agency, Li Yizhong, spoke of cadres and their relatives owning shares or running mines and extorting bribes as common across the country (*PD* 2007a).

4.4.2 Powers Enabling Extraction

High levels of extraction were possible because local officials held great power to close or obstruct privately-owned businesses. This is not particular to coal mining: property rights are weak across China's private sector (Clarke et al. 2008). However, the economic and political characteristics of the coal industry probably exacerbated mine owners' relative weakness, especially in the 2000s.

On the economic side, coal's status as a valuable but entirely commoditized product involving large sunk investments meant that mine owners had only limited bargaining power with officials, and probably less than owners in more complex, internationally-traded manufacturing industries enjoyed. Selling coal was not difficult in itself – the main obstacles revolved around obtaining the necessary relationships (Interviews 36, 58¹⁸). Nor was finding investors for mines, as capital poured into the industry. I

¹⁷Journalist who writes mainly on energy and environmental topics.

¹⁸Shanxi coal trader (36), Guizhou journalist whose family is in the coal trade (58)

am not aware of any systematic data about who the coal bosses were, but anecdotal information suggests that mine owners were more likely to be individuals who possessed some combination of capital and connections than technical knowledge about mining or coal markets (e.g. *The Beijing News* 2004; *EO* 2011d, 2011c; *World Vision* 2009), a point corroborated by interviewees (Interviews 73, 80, 81¹⁹). Technical expertise seems to have resided more with the engineering staff than with the owners themselves, and in any case could be hired in if necessary. In short, from the local governments' perspective, individual mine owners were probably replaceable. Evidence on the comparative level of fees paid in different industries supports this. Using survey data, Choi (2009: pp. 94, 96) finds that businesses which "rely heavily on resources under local government control" – such as mining – pay on average 33% higher fees than firms in more complex and competitive sectors, such as manufacturing.

If the economic dimension meant that mine owners' bargaining power was weak, coal mining's political position as a heavily regulated industry under severe policy pressure provided local governments with powerful levers vis-à-vis mine owners. While actual policies were formulated by provincial and central authorities, key implementational decisions – i.e., which mine would be affected how by a measure – were made at the county and municipal level. Local authorities were also responsible for day-to-day supervision and enforcement of mining regulation. Both gave them substantial power to negatively affect the mines' operations.

One example of the potential impact of day-to-day supervision was orders to "stop production and undertake rectification" (停产整顿). As the name implies, this involved mines having to stop producing and undergo inspections for safety risks. Only after passing these were they allowed to resume production. After major accidents, both Shanxi and Henan repeatedly decreed province-wide stoppages, and local authorities did so more frequently on a more geographically limited basis. For mine owners such stoppages could be very costly, especially as their timing and duration was unforeseeable. One boss from Zuoyun County (左云) in Shanxi claimed to have lost RMB 9 million in 2007, because the repeated county-wide stoppages after accidents in other mines in Zuoyun meant he had only been able to produce for 3 months that year (21 *CBH* 2008a).

Counties and municipalities were responsible for actually undertaking the inspections and permitting the individual mines to return to production. In other words, they could shut mines down if they wished – but also tacitly permit them to ignore the order and continue producing "illegally". In turn, this power enabled officials to extract money from the mine owners. As one boss explained why he donated money to "meaningless" (毫无实际意义) government projects like building a Tian'anmen replica, "not donating is not an option. If you don't donate, next time your mine is inspected, it won't be

¹⁹Energy economist from northern Shaanxi (73), former coalmine owner B from Inner Mongolia (80, 81)

passed.” (不捐不行，不捐的话你的煤矿要验收就会通不过) (quoted in Sun 2004?). Another Shanxi boss put it in similar terms: “[Without offering bribes to the local regulators], my coal mine would not be able to remain in operation for a day.” (没有这些打点，煤矿是一天都开不下去的) (EO 2009). Henanese bosses and retired cadres said much the same: orders to “stop production and undertake rectification” often went unenforced, but in turn the mines had to provide the local authorities with a steady stream of money (*China Times* 2010, *Economy & Nation Weekly* 2010a). In Shenmu, Shaanxi, too, mine owners told journalists that their large donations were not always voluntary, but that they had little choice (*Caijing* 2011). More bluntly, explaining why he had forsaken business to become a low-level civil servant, the son of a coal boss in Fugu, Shaanxi, summarized the relationship between bosses and officialdom as follows: “Don’t the rich still have to follow the leaders?” (quoted in EO 2012b).²⁰

The policies to consolidate the private coal sector adopted by the provinces after 2004 also increased coal bosses’ vulnerability. As I describe in Section 4.9, the consolidation measures initially adopted were to promote mergers among private mines (“local consolidation”), as a way of achieving central targets for industry consolidation and reductions in mine numbers while preserving the private sector. However, although they afforded a measure of protection to the *sector*, they afforded much less protection to *individual* mines and bosses. On the contrary: consolidation in practice involved county and municipal leaders drawing up plans for how the local coal industry was to be restructured (which mines were to merge with each other) so as to meet targets for mine numbers handed down from the province. Consolidation appears to have often been riven with conflicts as bosses fought over valuations of mines and concessions, were forced into mergers that made little economic sense or involved partners they did not trust, or sought to use the policy as an opportunity to take over other people’s mines. Often local officials seem to have left it up to the mine owners themselves to decide how consolidation was to proceed. However, they retained veto power over the final outcomes because they had to draw up (and gain provincial approval for) the final consolidation plans and closure lists, meaning they could force mines to close or merge.

Strong relationships were crucial for surviving this process unscathed because bosses had few other bargaining tools. As one coal mine owner explained, “small mines have no alternative and no escape, whatever [the government] demands of you, you must unconditionally obey . . . if you lack relationships, you might as well just close, as you have nothing” (小煤矿没有办法，也没有退路，上面让怎么干，只能无条件服从…不拉关系也许就要关了，一点脾气都没有) (21 CBH 2008a).

While local officials thus seem to have often treated the private mines as, in effect, a piggy bank (小金库) the flipside of this was that they also offered this sector a degree

²⁰Formally very low-ranking positions, such as the post of driver, which this individual apparently initially occupied, can still be valuable – and thus in high demand – if they involve substantial direct contact with local leaders. Drivers are a classic case of this (Smith 2009).

of protection from higher-level policy initiatives aimed at curtailing it. As we saw in Chapter 2, already in 1998–2001 the Center launched a large-scale campaign to close private mines. In the 2000s Center and provinces worked to consolidate the industry by closing mines that did not meet standards or lacked papers and clamping down on dangerous and illegal practices such as mining above capacity or mining across the borders of different mining concessions (cf. Sections 4.8 and 4.9). Local officials could not stymie all of these measures – the consolidation and later nationalization orders in particular seem to have been implemented relatively effectively – but as we will see, they did have some scope to benefit firms through regulatory forbearance. As the Fugu party secretary put it, expressing the basic *quid pro quo* involved in collecting “donations” from firms, “the government resolves problems for the firms, and the firms share in the government’s burdens” (政府为企业解困，企业为政府分忧) (*China Comment* 2011). Provincial and central inspectors as well as journalists complained about local governments tolerating or even facilitating all manner of illegal or unsafe practices, such as mining beyond capacity or across concessions, mining even after licenses had expired, unauthorized transfers of licenses, lowering capacity requirements or faking expansions to meet them, and fake mergers and closures to hit targets for reductions in mine numbers. The price of this forbearance was that the mines provided a steady stream of revenue to the local governments from taxes and, especially, informal fees and “donations”.

Local governments’ political power over the private mines was further increased by the weak legal-institutional foundations on which owners’ control of their mines often rested. This weakness was a direct result of the process by which the private mining sector had developed. I turn to this next.

4.5 Development, Regulatory Flexibility and Weak Property Rights

When economic development became the dominant political objective in China after 1978, local officials came under considerable pressure to grow their economies and “attract business and investment” (招商引资) (Ong 2012, Smith 2009, Whiting 2001). The opportunities this offered for self-enrichment provided a powerful additional incentive. Yet local authorities and businesses often also faced considerable regulatory and ideological restrictions on the range of permissible activities as the burgeoning private economy bumped up against the political and ideological constraints of a nominally communist state. Rigidly enforced, these constraints would have stifled growth. In practice, therefore, they were rarely cast in stone, and the result has been a developmental style in which businesses and local authorities enjoyed substantial – albeit not absolute – leeway to interpret rules “flexibly”, as long as this served the larger goals of the party-state (i.e., economic development).

The result has been a proliferation of what Peter Ho (2005) calls “intentional institutional ambiguity”. The state tacitly allowed actors to design opaque institutional

halfway houses so that their growth-generating economic activities could be accommodated while overt ideological conflict was sidestepped. Throughout the Reform era this has resulted in a situation where large areas of economic activity exist in legal grey zones – structures and practices whose legal status (political acceptability) is uncertain and which therefore adopt the mask, albeit not the substance, of other institutional forms that are more politically acceptable. The best known example of this (of which the case of the private mines' opaque property rights was an instance) was the proliferation of “red hat”-firms among the township and village enterprises of the 1980s and 1990s: companies that were nominally collectively-owned, but really owned and controlled by privates (Chen 2007). But similar arrangements existed in many other sectors, for instance land holding (Ho 2005) and informal finance (Tsai 2002). When these heterodox structures have produced positive outcomes, they have been gradually accorded retrospective legality and political legitimacy; when not, they were eventually abandoned, with occasionally harsh consequences for the individuals involved (Heilmann 2008, Steinfeld 2004: p. 645).

The development of the private coal-mining sector over the 1990s and 2000s is in some respects typical of this development style. Until the eruption of the safety crisis as a major political concern began to complicate incentives, the main policy priority with respect to coal mining in all case-study provinces was encouraging investment and growth. As a consequence, what were formally quite restrictive rules on granting mining rights were handled flexibly and extensive *de facto* private ownership of mines was accommodated, even though its legality and political acceptability remained unclear.

4.5.1 Regulatory Flexibility

To operate legally, a coal mine in China needs to obtain a concession (i.e., a coal deposit), for which it is expected to pay a fee, and six different licenses (four prior to 2004).²¹ Formally, the authority to issue these seems to have always remained with the central and provincial-level Coal, Land and Resources, Safety, and Industry and Commerce Bureaus, though some scope existed for delegating these powers to the municipal level.²² In practice, however, until the 2000s county and even village officials were able to issue mining rights – at least on an informal basis – without needing to pay much attention to higher levels, or simply disregarded the requirement for mines to possess permits altogether. One lawyer from northern Shaanxi who specialized in

²¹These are the mining licenses (采矿许可证), the coal production license (煤炭生产许可证), the business license (营业执照), as well as a mining certificate for the chief operational executive (矿长资格证书). After 2004, mines were further required to obtain a production safety license (安全生产许可证) and a safety certificate for the chief operational executive (矿长安全资格证).

²²The Coal Law (1996: Article 24) permitted the power to issue the coal-production license to be delegated to municipalities. Guizhou and possibly other provinces authorized counties to approve *artisanal* mines producing coal for local and home use by farmers – but not to approve commercial mining enterprises (Li and Liu 2003?).

disputes related to coal mining recalled how, in the 1980s and 1990s, village party secretaries would roam the land looking for potential investors, with mining concessions drawn up informally on little more than scraps of paper with an official stamp (*China Newsweek* 2010). This description is supported by other media reports and interviews (*CYD* 2003b, 2005; Interviews 24, 72, 75²³). The situation was similar elsewhere. In Shanxi, for example, there were apparently several thousand TVMs in operation in the mid-2000s that lacked complete or-up-to date licenses, a result in part of the highly informal licensing and concession-granting practices that had prevailed up to the turn of the century (*21 CBH* 2004a, 2006; *China Comment* 2007; *The Beijing News* 2008). The same was true of Guizhou, Inner Mongolia, and Henan (*CYD* 2001; Li and Liu 2003?; *Southern Metropolis Daily* 2006; Interviews 57, 58, 67, 71, 80²⁴). In other words, a substantial portion of the private sector was technically illegal (in the sense that it lacked complete licenses), making it particularly vulnerable to rent extraction by local officials.

From 1996 to 2000 coal prices slumped and mining profits were low in most or all provinces. As Figure 4.11 shows, the price for Shanxi coal at the benchmark Qinhuangdao port fell by almost 30% and local price declines were probably even larger (Wright (2012: p. 80). This further encouraged regulatory flexibility as investment now had to be actively solicited. While miner owners were supposed to pay a usage and compensation fee for the concessions they mined (资源使用费、补偿费), under these circumstances concessions were often given away for purely nominal sums or even for free. These years also saw the privatization of many smaller local state mines, as county and municipal governments sold off loss-making concerns. Inner Mongolia in particular seems to have taken a lead here, selling off not only almost all local state mines, but even those owned by the provincial government (*China Business Journal* 2014, *Qianjiang Evening Post* 2012, Interviews 10, 64, 78.²⁵). When prices recovered after 2001 and mine owners reaped large windfall profits this would lead to much conflict as privates contested each other's rights to the now suddenly-valuable mining concessions, and local and provincial authorities scrambled to institute new "fees" to gain a share of the windfalls.

CHAPTER 4. COAL-INDUSTRY CHANGE IN FIVE PROVINCES, C. 1995 - 2007.
POLITICAL ECONOMY AND POLICY



Figure 4.11: Coal Prices at Qinhuangdao, 1994 - 2003

Source: Sxcoal.com. Shown is the free-on-board price for Datong (Shanxi) premium-blend coal. I am indebted to Tim Wright (2012) for alerting me to this data.

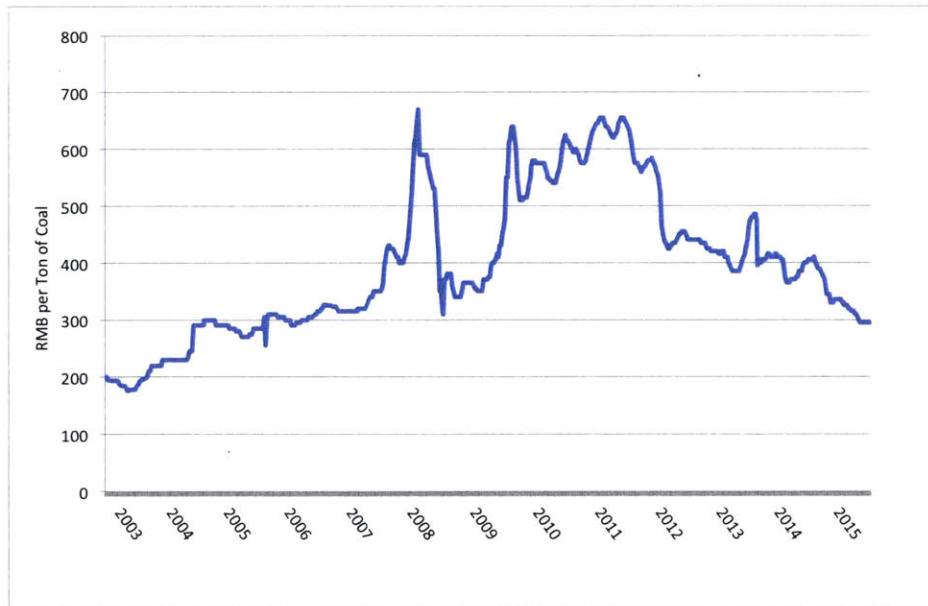


Figure 4.12: Coal Prices at Qinhuangdao, 2003 - 2015

Source: finance.ifeng.com. Shown is the free-on-board price for Shanxi mixed-blend coal. I am indebted to Tim Wright (2012) for alerting me to this data.

As discussed in Part III, regulatory practices in the case-study provinces began to be tightened significantly from about 2005 on. In all five, it became all but impossible to obtain mining rights and licenses at the sub-provincial level, and access to concessions and licenses was handled more restrictively in general. Especially small and/or poorly connected firms now found it hard to obtain these (*EO* 2011a). The most important reason for this was the increased political pressure over safety (Interviews 56, 57, 58, 70, 72²⁶). A further reason was that by now coal prices had begun to soar (cf. Figure 4.12). As profits were high, private and public investment poured in and large mining industries were developing in all five provinces. There was little further need for preferential policy measures to encourage investment. Moreover, given the monetary value that concessions and licenses had suddenly acquired, provincial authorities had strong incentives to regain control over what were now lucrative approval powers. In Shanxi in the mid-2000s, for example, obtaining all six licenses apparently cost up to RMB 3 million in under-the-table payments (*EO* 2011b).

Conversely, in regions like Xinjiang that were even more remote and undeveloped than the case-study provinces, regulatory matters seem to have continued to be handled in a more relaxed fashion well into the late 2000s, as these areas tried to make up for their geographical disadvantages through regulatory arbitrage to attract investment that increasingly found itself locked out of the more established coal regions, such as Shanxi (*China Weekly* 2009, *EO* 2007).

4.5.2 Accommodating Private Entrepreneurship in a Legal Grey Zone

Until institutional reforms were made between 2004 and 2006 (discussed in Part III, Section 4.8.2), the legal status of private investment in mining remained ambiguous. The original political and legal basis for the TVM sector was the 1983 State Council *Notice* and the accompanying *People's Daily* article discussed in Chapter 2. These documents

²³Energy economist from northern Shaanxi (24), economists from Xi'an who consult for local and provincial governments (72, 75)

²⁴Guizhou businessman and former Guizhou coal bureau official (57, joint interview), Guizhou journalist (58), former provincial-level official from Inner Mongolia and Ordos real-estate developer (67, joint interview), chief engineer at a Shaanxi coal-design institute (71), former coalmine owner B from Inner Mongolia (80).

²⁵Chinese economist who studies the coal industry (10), "consultant" who helps facilitate regulatory approvals for energy investments (64), geologist who consults for local and provincial authorities on mining development (78)

²⁶Senior engineer from a Guizhou coal-mining research institution (56), Guizhou businessman and former Guizhou coal bureau official (57, joint interview), Guizhou journalist (58), Economist from Xi'an (72), Shaanxi correspondent of a major national paper (70).

contained language that strongly welcomed what were in effect private enterprises, but avoided any direct mention of private ownership, which was still a political taboo at the time. Instead, they encouraged actors who were *de facto* private but could be more readily subsumed into socialist categories than private firms could be, to set up and invest in coal mines: “individual households” (个体户、专业户) and “the masses” (群众, i.e. ordinary rural residents).²⁷ “Individual household-operated” establishments were supposed to employ no more than seven individuals – a number chosen so that they would not classify as private/capitalist enterprises in Chinese Marxist theory – while mines invested in by “the masses” had no precise political-legal definition or status and the term soon disappeared again.

In the context of the early 1980s endorsing *de facto* private economic activity even in this convoluted manner was significant, and many of the smaller Township and Village mines founded in the 1980s indeed seem to have been private (the larger TVMs tended to be collectively-owned, at least in name) (Wright 2012). The overall signal the documents sent was more important than their precise wording. What they were saying, in effect, was that private economic activity in coal mining was acceptable, as long as it continued to wear a socialist hat and refrain from openly calling itself private.

But subsequent government pronouncements subtly restricted the political and legal space for legitimate private activity in mining. Neither the 1986 Mineral Resources Law (矿产资源法) nor its 1996 amendment, nor the 1996 Coal Law (煤炭法), mentioned private enterprise. The only entities engaged in mining that these laws envisioned were SOEs, collectives, and individually-operated mines, which were equated with the artisanal sector. The Mineral Resources Law stipulated that mineral resources were the property of the state and that SOEs were the “main entities that develop mineral resources” (开采矿产资源的主题) (NPC 1986 and 1996a: Articles 3, 4). Meanwhile, the legal operations of “individually-operated” mines were limited to mining small amounts for personal use and “fragmentary and scattered” deposits (零星分散资源) whose small scale made them unsuitable for mining by enterprises. When the law was amended in 1996, “individuals” were explicitly prohibited from mining deposits suitable for enterprise-scale operations (idem. 1986: Article 34, 1996a: Article 35).²⁸

²⁷The documents also encouraged townships and villages (村) to set up collectively-owned mines, and always placed these before mines invested in by individual households or “the masses” in the sentence structure, in order to indicate continued priority of the more socialist sectors of the industry. For further discussion see Chapter 2.

²⁸The ambiguity of these formulations should be noted: On the one hand the law operated within the terms of the official definition of “individually-operated” mines and enterprises: small-scale, artisanal establishments whose main purpose, in mining at least, was to provide for local rural households. Within these terms, the restrictions described were not unreasonable. They sought to prevent large fields from being carved up – and thereby destroyed – by wasteful and backward mini-mines. On the other hand, “individually-operated enterprises” had since the 1980s been a euphemism for private firms. The formal size restriction (no more than seven employees) seems to have never been enforced (Huang 2008: p. 100). By speaking only of state, collective and individual enterprises *and* explicitly limiting

The Mineral Resources and Coal Laws furthermore restricted the scope for legally transferring mining rights and licenses between enterprises and individuals. “Speculative” selling, renting or leasing of mining rights or concessions for profit (倒卖牟利) was forbidden. Legal transfers were limited to larger enterprise reorganizations such as mergers or enterprise sales (idem. 1986: Articles 6, 22, 1996a: Articles 6, 42; 1996b: Articles 25, 68). This matters because mines and mining righting very often were bought and sold in speculative fashion. Both laws moreover forbade “chaotic and wasteful” mining practices (乱采滥挖). Again, this was precisely what the TVMs were often accused of, and which was encouraged by the legal insecurity they confronted.

Evidently these restrictions did not prevent the rise of large mining industries that were private, in the sense that the real control rights and rights to the residual rested with private individuals, who also supplied much or all of the investment capital. But it did mean that prior to the institutional reforms of 2004–2006, when provinces began formally selling mining concessions and issuing licenses to private individuals, privates were systematically pushed into complex, opaque and insecure ownership structures.

Up to the mid-2000s, private investors seem to have mostly held mines through structures such as leases, entrusted management or rental agreements (承包、托管、委托、租赁). While the details of these arrangements no doubt varied tremendously, the basic structure seems to have been as follows: the mine and the underlying coal concession remained formally the property of the village (村、乡) or township, to which the mining licenses, too, were made out. The private then leased the use of the mine from the village for a fixed number of years, albeit often on a relatively short-term basis (i.e., only for a few years). During this period the private was responsible for operating the mine, paying all taxes, fees and wages as well as a rental fee to the village, while keeping all residual profit (Interview 9²⁹, *Oriental Outlook* 2005). *De facto*, the mine was privately controlled, but nominally it remained registered as collective property (集体), owned by the village or the township.³⁰ For example, when Gao Naize (高乃则), who was to become one of the richest coal bosses in Shaanxi, first got into coal mining in 1995, he did so by purchasing the “management rights” (经营权) of the Number 2 mine of Fugu township (府谷镇二矿). He did not purchase the mine outright (Xingmao Group 2011). Similarly, Meng Zhaokang (孟昭康), the Xiaoyi coal boss we encountered in Section 4.4.1, was careful to bring in minority investment from a major Shanxi SOE and also gave small amounts of stock to local villages (村), in order to “camouflage his mines as ‘state-owned’ or ‘village-operated’ pits” (给自己的煤矿涂上了“国有矿井”、“村办矿井”的保护色) (*Caijing* 2003). In other words, to secure his control of the mines, dividend flows to various state and community constituencies were arranged, in

the latter to non-enterprise scale operations, the law sent a clear message that private enterprise was not welcome in mining.

²⁹Shanxi journalist who mainly covers energy and environmental topics.

³⁰As discussed in Chapter 2, in China “collectively-owned” (集体) assets fall under totally different political and regulatory regimes than “state-owned” (国有) assets.

addition to the *de facto* bribes he provided (the buildings he purchased from county and municipal bureaus at above-market prices.)

Structures of this kind seem to have been preferred to outright sales because the legality of private coal-mine ownership and of privatizing coal resources was unclear, and because to be formally correct, sales and rights transfers would have required approvals from higher levels. While care was presumably taken to avoid *outright* illegalities as much as possible (e.g. by leaving the licenses and formal ownership in the name of the village, rather than transferring them to the private), these structures operated at best at the outer boundaries of formal legality. Because of this, the real (private) owners often seem to have established multiple layers of (nominal) legal representatives and leasees between themselves and the village or township from which they had obtained the mine, making it difficult to establish who really owned the mine. Opaque and complex legal structures of this kind also created obstacles for privates to raise new capital or cooperate with other firms or institutions to upgrade their mines. (*Caijing* 2003, *China Comment* 2007, *China Economic Times* 2007, *Southern Weekend* 2006b).

From 2004 to 2006 reforms were instituted to clarify ownership titles, give existing privates more secure rights to their mines, and establish a more regularized and market-based mechanism awarding coal concessions and mining rights (cf. Part III, Section 4.8.2). However, these seem to have made only a limited difference. Thus the semi-official *Blue Book of Shaanxi's Economy 2009* concluded that

the system for allocating mining rights via market [mechanisms] like inviting tenders or auctioning remains imperfect. Primarily for historical reasons, in many localities the identities of the investors and the property rights to small mines remain insufficiently clear, and small and medium-sized mines continue to be frequently resold. As a result, the property rights are extremely complex. (Li et al. 2009; cf. also Li et al. 2011).

While this assessment was written specifically about Shaanxi, there is little reason to think that the situation was substantially different elsewhere, and indeed that is what other materials also suggest (e.g. *Oriental Outlook* 2005).

4.5.3 Consequences of Insecure Licenses and Weak Property Rights: Weak Legal Security, Clientalism, and Speculative Business Strategies

4.5.3.1 Legal Insecurity and Clientalism

Ambiguous legal titles, weak property rights and lack of legal security meant that mine owners without sufficiently powerful protectors were at risk of having their mines

stolen from them by better-connected individuals. Two cases from northern Shaanxi illustrate this well. The first concerns a mine that was set up as a collective owned by a natural village (村)³¹ in Hengshan county (横山) around 1995. Lack of capital forced the villagers to bring in a private investor from Shandong as a partner. When the mining license came up for renewal in 2000, the investor had the new one issued in his name, allegedly by falsifying deeds. Legal and political proceedings followed as the villagers sued the investor and the provincial Land and Resources Bureau (which had issued the license), and petitioned the provincial government. In 2007 the provincial high court ruled in favor of the villagers – but the Land and Resources Bureau simply refused to implement the decision. The Shandong man retained control of the mine. In 2010 serious violence broke out as over 100 villagers armed with field tools stormed the company compound and the management mobilized mine workers to drive them off. 87 people were injured. This gained the case national attention, but further progress for the villagers only came in late 2014, when the head of the provincial Land and Resources Bureau was arrested on corruption charges, though what the ultimate outcome will be remains unclear (*CYD* 2010c, *Economic Information* 2014, *Xinhua* 2010).

Cases such as the above were apparently quite frequent in northern Shaanxi (Yulin 2007?, *CYD* 2011c), and very likely elsewhere, too, as were cases of serious violence between villagers and mining companies over mining rights and compensation for damages (e.g. *CYD* 2011d, *SCMP* 2005). Of interest here is not which side was in the right in the above case, but that ambiguous property rights naturally led to severe conflict once the underlying resource became valuable, and that victory in these conflicts depended mainly on political support and shifting local and national politics. That in turn provided mine owners with a strong motivation to cultivate close relations with cadres. Indicatively, one of the largest “donors” to the government of Fugu county was himself involved in a conflict much like that of the Hengshan villagers and the Shandong man. He too was accused of falsifying documents to steal a mine (*China Comment* 2010, *Economic Information* 2012).

The second case involved provincial and national political elites as predators. Here again legal claims were worth little, and outcomes depended primarily on the relative balance of political power. The case shows how legitimate concerns over loss of state assets and deepening industrial development could be instrumentalized for the purposes of theft.

A PLA veteran named Zhao Faqi (赵发琦) had signed a mining exploration and development agreement with the Shaanxi Geology Bureau (陕西省地址矿产局). Zhao probably had some connections of his own, for otherwise it is unlikely that he could

³¹Note that “natural villages” (村) are not part of the Chinese state administration, and their leaders (the elected village headmen) are not state cadres. In other words, the conflict over the mine discussed here did not pit a private against an organ of the state administration (as it would have had the mine been invested in by a township (乡镇), but two private parties against each other – the villagers against the investor.

have obtained the exploration agreement. However, when he discovered a very large and valuable coalfield the Bureau rescinded his license and cancelled the agreement. This was justified with a provincial decision – taken, it seems, *after* Zhao had discovered the field – that made issuing exploration licenses a prerogative of the provincial government, not of its bureaus, and with the failure of the original agreement between Zhao and the bureau to include a coal-refining project (转化项目) in the development plans, something Shaanxi was eager to pursue as a way of raising the share of local value-added.³² The rights to the field were then given to a joint venture between Sinochem, a centrally-owned chemicals SOE, and a private company owned by the daughter of a Shaanxi county chief who was apparently linked romantically to the minister for labor and social security and former Shaanxi vice-governor. While this was at one point justified with preventing “major losses of state assets” (国有资产严重流失) and promoting the development of coal refining, Sinochem in fact never took more than a 10% stake and soon returned even this to the private partner. Sinochem’s involvement appears to have mainly served as a fig leaf to give plausibility to the new owners’ claim to be undertaking coal refining, though no such plants were in fact ever constructed. Like the Hengshan villagers, Zhao sued and won initial cases before the municipal and provincial high court, but political intervention by the Shaanxi provincial government led to a change of verdicts. Finally, Zhao was arrested on accusations of having falsified documents (Garnaut 2010, 21 *CBH* 2011b).

4.5.3.2 Speculative Business Strategies

Besides cultivating clientalistic relationships, a second response of many mine owners to the endemic insecurity they confronted seems to have been to minimize sunk investments and pursue strategies with short time horizons. Very large private mining companies that invested heavily and used advanced technology did develop, especially in Inner Mongolia, though several such firms also existed in Shanxi. These companies usually had very strong political connections that could provide significant, albeit not absolute, security, enabling them to pursue longterm strategies.³³ But these firms were not representative of the wider private sector, which was predominantly composed of small firms. Among these firms, short-term, speculative and investment-light strategies seem to have predominated.

One phenomenon this expressed itself in was the extensive speculative buying and re-selling of mines (炒卖／层层转包), which is attested for all of the case-study provinces. Investors would buy mines (or often rather mine leaseholds and operating rights) with the primary aim of selling these on in a few years as valuations rose. While they

³²Refining projects such as coal-to-methanol, coal-to-liquid fuels and coal gasification rarely interest private investors because profit margins are much lower than in just mining and selling raw coal. Interview 18, coal-industry analyst at a Chinese securities company.

³³However, in 2009/2010 even some of the largest and best-connected Shanxi firms entered into merger agreements with SOEs in order to acquire protective “umbrellas” (保护伞).

held them they would of course operate them, but had little incentive to undertake larger investments (though this was sometimes forced on them by local authorities) (*CYD* 2005a, *EO* 2011c, NDRC 2008, *Southern Weekend* 2008a, Interviews 3, 9, 32³⁴). As bosses told journalists, given the risks they confronted, making just the minimal investment necessary was the only rational thing to do (*Dahe Daily* 2010, *Oriental Outlook* 2005, *World Vision* 2009). However, underinvestment in turn increased safety risks.

A further manifestation of this short-termism was operators' reported tendency to run mines above their capacity (超标). Mines are licensed for a maximum safe production capacity, but it is usually physically possible to produce significantly more, though this again magnifies safety risks. Especially in Shanxi and Henan, the frequent production stops forced on mine bosses (see below) as well as the broader insecurity of the political and regulatory environment encouraged this behavior, as owners tried to grab as much value as possible while they could operate the mine, and naturally lacked all incentive to invest (*Oriental Outlook* 2005, 2008; *World Vision* 2009). For instance, while total registered production capacity in Henan was about 100 million tons in 2008, total production was near 200 million tons (*Henan Legal Daily* 2009). Poor mining practices also caused significant destruction of coal resources as bosses – unsure how long they would still possess the mine – only took the most easily mined parts of the seams, behavior dubbed “eating the heart of the cabbage [and discarding the rest]” (吃菜心) (Interview 9, *CYD* 2004a).

4.6 The Limits of Local-State Power: State-owned Enterprises

While subprovincial authorities thus enjoyed considerable power to extract from and generally control the activities of private mines, their powers vis-à-vis the large state firms owned by the provinces and the Center were far more limited. As the production statistics in Part I, Section 4.2 showed, the state coal sector largely consisted of these firms (the Key State Mines). The *local* government-owned state mines only formed a small part of the state sector and the coal industry overall.

There were three main reasons for this different balance of power between the large SOEs and subprovincial governments. Firstly, these firms' activities were largely regulated by provincial or central authorities and generally met or exceeded all technical standards. They also had few problems obtaining licenses, meaning their papers were generally complete. Localities thus had little regulatory leverage over them. Secondly, these firms possessed substantial political and bureaucratic power of their own: provincial firms outranked villages and counties, and held the same rank as municipalities (地厅级); central firms had the rank of provinces and ministries (省部级). They also provided provincial and central leaders with valuable patronage resources (jobs, investment

³⁴Shaanxi (3) and Shanxi (9) journalists who write mainly on energy and environmental topics; analyst from a Shanxi-based energy and heavy industries consultancy (32).

projects), in turn giving them bargaining power and deep informal connections. In the case of provincial firms, moreover, their principals (the provincial leaders) were simultaneously the principals of the local governments. Thirdly, they were also often able to supply themselves with inputs like electricity, water, or transport capacity, making them less dependent on locally-controlled resources. Indeed, they sometimes controlled resources that the locality depended on. For example, Yulin City (榆林) in northern Shaanxi depended on railways owned by the Shenhua Group (a centrally-owned SOE) to ship coal produced by local privates to market (Interview 74³⁵, *Yulin Daily* 2008).

Ownership of the local mining industry by these firms had both advantages and disadvantages for local authorities. Overall, the latter seem to have outweighed the former, and this explains why local authorities, as a collectivity, tended to be resistant to nationalization. However, specifically for municipal leaders, SOE ownership of coal mines could, by the late 2000s, also offer advantages, and that helps explain why nationalization in Shanxi seems to have begun as a joint project of the provincial administration and a reforming party secretary and mayor in Linfen and Datong. As we will see in Part III, Section 4.7, SOE ownership also offered advantages for provincial leaders.

4.6.1 Disadvantages of SOE Ownership

For local governments, the main disadvantages of SOE control of the coal industry were, firstly, the limited fiscal contribution these firms made locally and the low scope they offered for informal extractions; secondly, their limited contributions to local employment; and thirdly the difficulty of controlling their sometimes destructive mining activities.

4.6.1.1 Controlling Firm Activities

Mining is by nature destructive. Common consequences include cave-ins, which can lead to structural damage to buildings and infrastructure, pollution and sinking groundwater levels causing damage to residents' health, vegetation and agriculture, and even seismic activity. All of these were widespread in the mining areas (see e.g. *Caixin* 2012, *Danwei* 2009, *Economist* 2012, UNDP-World Bank 2004, Interview 78³⁶). For the local governments, these phenomena were not only bad in themselves, but could also create social conflicts and protests.

Given their more technologically advanced operations, the SOEs were probably less destructive, at least in relative terms, than the private mines (cf. UNDP-World Bank 2004: p. 23). However, while local officials could control the privates' activities and

³⁵Local Shaanxi journalist who writes mainly on energy topics

³⁶Chinese academic (geologist) who does much consulting for the state and major firms on mining-related topics, esp. post-mining reclamation and pollution control.

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intervene before conflicts got out of hand³⁷, they had no such power with the SOEs. As one former mid-level manager of a central-state coal SOE who also had close links to the municipal government where some of its main mines were located, put it, from the city's perspective the SOE was an "independent kingdom" (独立王国) within the city's territory. For instance, the city did not even know how much coal the company was really mining, and suspected it might be as much as two-thirds more than it declared (Interviews 37, 84³⁸). An official from a municipal coal bureau made the same point: the city had no real control over the large SOEs' activities in its vicinity (Interview 39).³⁹

Yulin, where Shenhua operated large mines, provides a good example of the conflicts this could lead to. As a remarkably candid document posted on the website of the city's commerce department (商务局) reported, its mines had caused extensive damage to residential buildings in several townships, forcing villagers to move. In some cases, cave-ins were barely 30 meters away from their homes. However, the compensation Shenhua paid was far below the actual costs, leaving villagers stranded in temporary shelters. Discharge of untreated waste was polluting local ground water, and casual post-mining land reclamation had left areas at risk of spontaneous coal fires. As a result there had been a sharp increase in social conflicts, with villagers petitioning Shenhua, the provincial government and even Beijing over 100 times (Yulin 2006). However, local officials stressed, they had "no power whatsoever" to influence [Shenhua's] behavior (地方政府在[央企]面前, 没有丝毫说话权力) (*Southern Weekend* 2008a). There were similar conflicts over SOEs' failing to pay compensation in Shanxi (Lüliang People's Congress 2012).

These claims of *complete* local-government powerlessness in the face of large SOEs probably overstate the case. Rather, it seems that while local governments unambiguously had the upper hand with private mines (unless these were very well connected) and could thus exercise substantial influence over their operational decisions and freely extract from them, in the case of SOEs, the balance of power between the two was at all times much more equal, and thus the local governments' scope to influence their operational decisions and extract from them was much smaller. Which side enjoyed the marginal advantage in this game depended on the specific and varying local distribution of political, economic and infrastructural resources.

As the former SOE manager explained, it was necessary for SOEs to maintain basic working relations with the localities, for otherwise they could create trouble, especially

³⁷The remarkable environmental destruction and low-level strife in the mining regions suggests that local officials often either did not intervene or intervened on the side of the mine owners. However, in these cases they could expect the privates to compensate them for their forbearance. With the SOEs, they ended up with the damage but without the compensation.

³⁸Repeated interviews with the same individual.

³⁹Eric Thun (2004) finds a similar pattern in his study of China's auto industry. Municipalities had little scope to influence, let alone control, the activities of centrally-owned firms.

if they were able to affect the SOE's access to electricity or water, or if the firm was trying to acquire new land or mines in the locality, which usually required the county's and municipality's consent. In these situations, the locality had some hold-up power, and could use it to extract fiscal benefits or other concessions. This could go as far as inciting the local population to stage protests over the SOE's behavior, for instance in regard to compensation payments (Interviews 37, 84).

The precise bureaucratic relations between the institution that owned and supervised the SOE and the local authority where it operated mattered considerably to how, in turn, SOE and local government related to each other. Centrally-owned SOEs (CSOEs) were on the face of it more powerful than either provincially-owned SOEs (PSOEs) or local governments, because they held a higher rank, controlled far greater resources, and had strong relationships to central leaders. (PSOEs' and local governments' relationships mainly ran to the province.) However, according to both this ex-manager and the senior central-government tax official I interviewed, localities would often use much more confrontational tactics when confronting CSOEs than when confronting PSOEs because while the principal of the PSOE (the provincial leaders) was also the principal of the local leaders – able to give orders to them and decide over their advancement – the institutions supervising the CSOEs (mainly the State-owned Assets Commission) had no authority over local governments. Moreover, because PSOE and local-government leaders belonged to the same provincial administration, they might swap places or come to depend on each other in other ways in future. Accordingly, their incentives were to refrain from confronting each other too aggressively. Conversely, with CSOEs, when localities did have hold-up power, they would feel more free to use it to its full extent. Concretely, this meant that provided they possessed the necessary hold-up power, the localities could extract more payments from CSOEs than PSOEs (because making “excessive” demands on PSOEs might cause the provincial government to intervene, while intervention by the State-owned Assets Commission was less of a concern) (Interviews 37, 84, 53).

4.6.1.2 Employment

Due to their labor-intensive mode of production, the small-scale private mines tended to create relatively large amounts of jobs. While mine owners generally preferred employing migrant workers from other provinces as underground workers – because their and their families' lack of local connections would facilitate “resolving” any accidents that might occur – the large influx of comparatively well-paid workers seems to have naturally created substantial additional employment for locals. By the middle and late 2000s, on the other hand, the mining operations of the large SOEs tended to be highly mechanized and employ comparatively fewer workers. While that made them attractive to provincial governments concerned about accidents – fewer miners underground meant less potential for large accidents – it also meant that they created fewer direct or indirect employment opportunities. Indeed, after Shanxi nationalized the mines, unem-

ployment seems to have spiked in major coal-producing areas (Caijing 2010c, Lüliang People's Congress 2012, Interview 3⁴⁰).

4.6.1.3 SOEs' Fiscal Contributions to Local Governments and Informal Extraction

Chinese companies pay taxes where they are registered as legal entities. Subsidiary units can be structured either as “branch companies” (分公司) or as “subsidiary companies” (子公司). *Only the latter* are independent legal-person and thus independent tax-paying entities. In other words, a company with headquarters registered in Beijing and “branch companies” strewn across the country will *only* pay taxes in Beijing, and can moreover put the profits and losses of the different branch companies against each other, to minimize the overall tax burden. Especially for mining groups, which might have several highly profitable mines and numerous less profitable or loss-making units elsewhere, organizing all these as branch companies is very attractive. However, this hurts local governments because except for special taxes that are paid on local production activities, like the Resource Tax (资源税), the branch companies will pay no taxes locally. (*EO* 2013a, Interview 61⁴¹).

One example of this phenomenon is the centrally-owned Shenhua Group, China’s largest coal company. Shenhua’s largest and most important mines are located in Yulin (Shaanxi) and Ordos (鄂尔多斯, Inner Mongolia). Shenhua structured these as branch companies, causing intense local resentment (cf. Yulin 2006, 21 *CBH* 2008b, 2008c, 2009b). In mid-2008, in response to many years of complaints and lobbying of the central government by Yulin, Shenhua finally promised to reorganize its Yulin mines into subsidiary companies (*Yulin Daily* 2008), but in Ordos – despite longstanding negotiations and lobbying by the Ordos city government – the mines remained branch companies up to, at least, mid-2013 (*EO* 2013a)⁴².

Organizing mines as branch companies hardly exhausted the large SOEs’ options for minimizing local tax payments. For instance, as the Yulin government complained, the breadth of the large SOEs’ activities along the value chain and their geographic spread meant that they could exploit transfer-pricing mechanisms to further reduce their tax liabilities, or use political power to simply refuse to pay certain charges by claiming exemptions that they were (in the city’s view) not entitled to (Yulin 2006). There were similar complaints about SOEs’ exploitation of transfer pricing to limit local tax bills in Shanxi (Lüliang People’s Congress 2012).

⁴⁰ Journalist who writes mainly on energy and environmental topics

⁴¹ Senior central-government tax bureau official

⁴² That year Ordos began a new lobbying campaign to push for reorganization of the mines as subsidiary companies (*EO* 2013a). I do not know whether this was successful. It is worth noting that interviewees in Shaanxi in 2013 claimed that tax-related conflicts between Yulin and Shenhua remained intense, despite the reorganization of its Yulin mines as subsidiaries.

The SOEs also lobbied effectively against changes to the tax code that would have disadvantaged them. Probably the most important instance of this – from the perspective of the coal-producing localities – was the Resource Tax, which is paid locally. However, until 2015 it was calculated on a per-quantity basis (i.e., RMB/units of output) rather than as a percentage of the sales price. As a result, localities were unable to benefit from the spectacular coal price rises in the 2000s. Despite periodic upward revisions, the real tax rate actually fell: As one provincial tax official explained, when the Resource Tax was set at RMB 1.6 per ton in 2000, the average price of coal had been RMB 35, yielding a tax rate of 4.6%. By 2010 the tax had been raised to RMB 3.2 per ton, but coal prices now averaged RMB 400, meaning that the rate had fallen to 0.8% (*21 CBH* 2010a). Throughout the 2000s, the localities had pressed for both revising the levy upward and changing the Resource Tax to a percentage-based formula, but this had been met with fierce and largely successful resistance from the large state firms (Interviews 61, 75).⁴³

Cumulatively, the above factors meant that provincial and central mining SOEs often paid only limited amounts of taxes locally (Li et al. 2009). Adding injury to insult, because the local governments had no regulatory and only limited hold-up powers over the SOEs, they also had only limited scope to extract “grey” (i.e., tacitly tolerated) informal payments like “fees”, “donations” or other contributions to community projects from them (灰色收入). As a result, the effective tax-and-fee burden on local firms in Yulin in 2006 was, apparently, about RMB 63 per ton, but only RMB 28 for “outside” (外地) firms like Shenhua (*21 CBH* 2006b). Officials in Shenmu (where Shenhua’s main Yulin mines lay) claimed that while the county’s 150-odd private mines contributed 70% to county revenues, Shenhua contributed only 1% (*China Times* 2011a).

To be clear, it is not the case that county and municipal authorities – albeit probably not village and township officials – had no scope whatsoever to extract *any* grey payments from SOEs, though several interviewees were emphatic that obtaining unambiguously illegal “black” payments like bribes from SOEs was very hard for local officials (Interviews 15, 20, 37⁴⁴). I know of one major CSOE that in the late 2000s was providing a municipality where it was seeking to acquire new land with about RMB 300 million annually for “environmental protection”.⁴⁵ Similarly, in 2008 Shenhua promised Yulin municipality a one-off payment of RMB 150 million to support local education, and also promised Fugu and Mizhi (米脂) counties RMB 2 million for poverty relief (*Yulin Daily* 2008).

⁴³Senior central-government tax bureau official (61); economist at a university in Shaanxi (75). In 2011 a percentage-based formula for the Resource Tax payable on oil and gas was introduced on an experimental basis, but these changes were only expanded to coal in 2014/2015 – by which time the coal price had collapsed.

⁴⁴Chinese journalist (15), Chinese scholar (20), former SOE manager (37). Both interviewee 15 and 20 have done extensive work on coal and other energy industries.

⁴⁵As far as I was able to learn, this was a disguised kickback. The city would hand in receipts for “environmental protection work” and have these reimbursed with no further questions asked. I do not know for how long the scheme continued.

To put these donations in perspective, it should be recalled that during these same years, Fugu county raised over RMB 1 billion from the local private mines, and that the donation by Shenhua only came about after Yulin went as far as to protest to the central government. Sources consistently describe relations between the local governments and the large SOEs in the coal-mining regions as poor, with their low tax contribution and the difficulty of extracting “grey” or “black” income from them given as the main reason. Local governments deeply resented seeing “outside” firms mining “their” coal.

The already-cited document from Yulin expresses this anger openly: “The current tax system and other policies and mechanisms for distributing the wealth from natural-resource development”, it fumed, “are irrational, unfair, unscientific, and neither conform to the scientific perspective on development nor are they suitable for building a harmonious society.” (不合理、不公平、不科学、不符合科学发展观和和谐社会的建设) (Yulin 2006). This was written in 2006 – before Shenhua’s above-mentioned donations and promise to restructure mining operations into locally-registered subsidiaries – but according to local interviewees, relations remained poor and one vice-mayor had even been removed from office (免职) because he “complained too much” (闹了太多) about the lopsided distribution of benefits (Interviews 70, 72, 74, 75⁴⁶).

While the language just quoted was remarkable for its candidness, feelings appear to have been similar elsewhere. In 2008, one vice-mayor of Ordos, Inner Mongolia’s most important coal region, argued that the distribution of fiscal revenues from mining had to be revised: most of the SOEs active in Ordos were CSOEs; therefore their taxes largely went to the Center, not to the localities (21 CBH 2008b). During the nationalizations in Shanxi and Henan, their effect on local-government fiscal revenues emerged as a major point of contention, and sources stressed that the real issue at stake were the informal “grey” and “black” payments that officials had hitherto received (e.g. *Economy & Nation Weekly* 2010a, 2010b). The narrow *tax* effects were fairly easy to resolve, because the SOEs could (and, it seems, generally did) structure the acquired mines as locally-registered subsidiaries, thus leaving the regular tax flows unchanged – though, as the personal assistant to the head of one major Shanxi state coal company noted, the local government had no guarantee that the firm might not alter the place of registration in future (Interview 87). Conversely, informal payments and contributions to community projects were greatly reduced, and because they anticipated this change, local officials had little enthusiasm for nationalization. As one complained,

in the past, if we asked a [private] mine to build a school, [the boss] would have to build it. If we asked him to repair a road, he would not dare refuse. But now that the mines are controlled by the province, we can’t even get them to repair a toilet”. (*Southern People Weekly* 2009; similarly also *Caijing* 2010c).

⁴⁶Shaanxi correspondent of a major national paper (70), local Shaanxi journalist who writes mainly on energy topics (74), economists at universities in Xi'an (72, 75).

Alluding more directly to the effect of nationalization on the flow of bribes local officials had hitherto enjoyed, the head of a local work safety inspectorate told a journalist that “the closure of the private mines has had a huge impact on us, though we cannot speak about this openly as it involves certain unspoken rules.” (民间煤矿都关停了，这其实对我们影响很大，只是这个影响不能放到桌面上讲，因为它是一个潜规则，虽然尽人皆知，但仍然不能讲). He went on to explain that, “when you possess veto power, all kinds of benefits will flow your way. Even if you want to dodge them, you won’t be able to” (当你手中有了一票否决的权力之后，各式各样的利益就会随之而来，躲都躲不掉). With the large SOEs, however, his office held no such “veto power”, causing the stream of benefits to dry up (*EO* 2009). Similar complaints and concerns were voiced in Henan (*Caijing* 2010d; *EO* 2010a, 2010b). Interviewees too stressed the disappearance of grey and black earnings as a key reason for local officials’ opposition to nationalization (Interviews 15, 20, 37/84, 53, 81, 88⁴⁷). After nationalization, counties and villages (乡、村) complained that they now face deep fiscal problems (*Chinese Business News* 2009, Lüliang People’s Congress 2012).

From the perspective of the provincial government, however, the disappearance of local officials’ access to “grey” and especially “black” income, however, seems to have been as much a feature as a bug. Work-safety officials believed that local corruption played a central role in the safety crisis (e.g. State Council 2005c, *PD* 2007a). One scholar who had discussed the nationalizations directly with officials in Shanxi claimed that ending the local governments’ corrupt involvement in the industry was a key motive for the Shanxi government because of the perceived link between corruption and accidents (Interview 20). This is supported by the Shanxi Work Safety Agency’s Power Point presentation, which stated that one of the main purposes of the nationalization was that it would “protect cadres, removing them . . . from [the possibilities for] corruption in the coal and coking sectors” (保护了干部, 让干部...远离煤焦腐败) (Huang 2011: Slide 18).

4.6.2 Advantages of SOE Ownership of Coal

As several interviewees noted, having SOEs – in particular CSOEs – develop the local coal resources also has advantages, however. The combination of their high technological capabilities, financial strength, and political clout that generally enables them to obtain all necessary licenses and approvals, means that they can execute very big, investment-heavy projects that spur local GDP growth and get local leaders noticed. Best of all, not only does their high technological capacity mean that such projects are

⁴⁷Chinese journalist (15), Chinese scholar (20), former coal CSOE mid-level manager (37, 84), senior central-government tax bureau official (53), former coalmine owner B from Inner Mongolia (81), Chinese journalist from Shanxi (88). The two journalists and the scholar have written extensively on energy and environmental issues.

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unlikely to result in serious work or environmental accidents, but if they do, responsibility will mainly lie with the company executives, not with the local government leaders (Interviews 57, 63, 68, 72, 84; cf. also *21 CBH* 2011c).⁴⁸

Subprovincial administration is not a monolith. Officials of different ranks and levels of local government have distinct and often diverging interests (Kostka and Yu 2014, Smith 2015). In particular, research suggests that county leaders and municipal leaders enjoy very different further promotional prospects. Because they usually lack the necessary age and educational qualifications and ties to provincial leaders, it is very difficult for county leaders to rise much beyond the county. Conversely, municipal leaders are often sent down from the provincial administration and seem to have more realistic prospects of further high-powered promotions (Kostka and Yu 2014). In other words, it appears that municipal leaders have relatively stronger incentives to orient themselves according to the wishes and policy priorities of provincial and national leaders than county leaders (not to mention heads of county bureaus) have. Of course, as Genia Kostka points out, usually municipal leaders have strong incentives not to act against the dominant local political and business interests and alliances because they depend on these people's cooperation to effectively govern the locality, especially as their usually short tenures force them to seek rapid achievements (Kostka and Eaton 2012 and personal communication from Kostka, Beijing May 2012). Moreover, given the primacy the Chinese system places on achieving local GDP and fiscal-revenue growth, cooperating closely with these interests is *usually* in line with provincial and national policy priorities.

However, should crises emerge that pit local economic interests (and the local political networks linked to them) against provincial or national policy priorities, then the interests of municipal leaders looking for further promotion can diverge from those of the other local officials with few such prospects. Arguably, this is what began to happen with the work-safety crisis in Shanxi: safety emerged as a national and provincial priority, but to the extent that solving it required significant restructuring of the small-scale private mining sector, it ran counter to local interests. Yet for ambitious municipal leaders, solving the safety problem in their locality could be a way of distinguishing themselves, and having large SOEs run the industry was a means to achieve this. Thus it is not surprising that we see nationalization being initially pioneered in early 2008 in Linfen and Datong municipality.

Of course, policy experiments of this kind will always be undertaken with some level of support and agreement from the province or even the Center (Heilmann 2008). It is hard to imagine that a municipal leader would embark on a policy as controversial and conflict-ridden as forced nationalization of a lucrative local industry without assurances

⁴⁸Guizhou private invested in energy with an official background and a former official from the Guizhou coal bureau (57, joint interview); division-level (处级) provincial-government cadre (68); economists from Xi'an who consult for provincial and local Shaanxi governments (63, 72); former mid-level manager at a CSOE (84).

of support from provincial leaders. Yet it nonetheless appears significant that these experiments should first occur in Linfen and Datong. Both of course were centers of Shanxi's coal industry, and Linfen also had a particularly severe accident problem. Yet both cities also had ambitious leaders – Geng Yanbo (耿彦波) in Datong, Xia Zhengui (夏振贵) in Linfen – who enjoyed the special trust of the provincial leadership and had apparently been appointed with a specific mandate to clean up the consequences of the two cities' rapid and chaotic coal-industry development (Kostka and Eaton 2012, Tan 2009) – precisely the kinds of cadres most likely to orient themselves towards provincial policy priorities, even at the cost of riding roughshod over local interests.

Part III Provincial Coal-Industry Policies, 2001 to 2008: Rent-preserving Industry Change

As discussed in Chapter 2, after having encouraged or at least tolerated TVM growth in the 1980s and early 1990s, from 1998 onwards central policy swung decisively against the TVM sector. That year, a nation-wide campaign to “close mines and reduce production” (关井压产) was launched, which ran until 2000. As Tim Wright (2007) and Kevin Tu (2011) have shown, this campaign largely failed to achieve its objectives. Impressive reductions in TVM numbers were duly reported and logged output from TVMs declined substantially between 1998 and 2000, both nationally and in the case-study provinces (cf. Figures 4.1 to 4.5 in Section 4.2.1 above). But this seems to have mainly been an artifact of statistical manipulation by local authorities (Wright 2007, Tu 2011)⁴⁹

The 1998-2001 closure campaign had been motivated less by concerns over work safety, which had yet to emerge as a salient political and media issue (cf. Chapters 2 and 3) than by concerns to shore up SOE profitability, which had been badly hit by falling coal demand and “overproduction” from TVMs. The campaign sought to push the burden of adjustment onto the TVMs, by closing them, in order to protect the SOEs. When rapid growth and thus coal demand and prices recovered from 2001/2002 onwards, the campaign was relaxed and TVMs were quietly allowed to resume legal production (Wright 2007, cf. Xinhua 2001). Across the country TVM output rapidly bounced back after 2000, and indeed was soon greater than ever before.

Chapter 2 has already chronicled the evolution of central-state policy in the 2000s. Here, I trace how provincial policy and actions and industrial change on the ground in the case-study provinces evolved from c. 2001 to 2008. While the coal boom of those years ensured that SOE profitability and market competition between private and state mines was no longer a critical issue, central officials continued to regard the unchecked growth of poorly regulated small-scale private coal mines as a serious problem. In their view, these mines destroyed coal resources, severely polluted the environment, and were creating a publicly highly-visible safety crisis. Central-state policy therefore continued to press for tightening regulatory oversight and curtailing and ideally eliminating this sector by raising entry barriers and closing or at least consolidating the small mines, preferably through SOE takeovers. Authoritative policy documents were issued by the State Council demanding action (esp. State Council 2001, 2005a, 2005d, 2007d, SCWSC 2006a). A consistent vision was articulated for concentrating the industry under a small number of very large, preferably state-owned enterprise groups that were to gradually integrate the entire coal value chain, from mining to coal refining, transport, and power generation (cf. Chapter 2).

While safety was not the only reason for the Center to push for restructuring and tightening regulatory control over the industry, the safety crisis clearly played an important

⁴⁹Su Fubing (2004) argues that the 1998 campaign was successful, but does not address the statistical anomalies highlighted by Wright and Tu.

role. This is evident from the sharp increase in the number of references to mining safety in central-state policy documents (cf. Chapter 2), and from the timing of central interventions: as we will see below, in several cases these can be linked to specific accidents or series of accidents.

Provincial officials shared many of the Center's concerns over the negative consequences of "chaotic" private coal-mine development, but they also had to deal with a complex and recalcitrant reality, in which the TVMs provided local officials with large fiscal and rent flows, and helped provide employment locally. As a result we see a pattern of change that sought to both meet the Center's core policy demands (better safety performance, reduction in the number of operating mines, concentration of coal production in larger mines), while accommodating local interests. The private mining sector – and thus the rents it supplied – would be preserved, albeit in a restructured form. The Chapter Part traces this pattern in three issue areas; strengthening the state mining sector (Section 4.7); tightened regulation (Section 4.8); and closure and consolidation of mines (Section 4.9).

Section 4.7 shows that after 2000, Shanxi, Shaanxi, Henan and Guizhou all took measures to strengthen the position of their own provincial SOEs in the local coal industry. Mainly this involved corporatizing and consolidating the state-sector firms, to create large state-owned "provincial champions". Policy documents from all four provinces articulated the same vision for the coal industry as we encountered in central-state policy documents in Chapter 2: large SOEs that would integrate the entire coal value-chain were to be created and come to dominate the industry. Yet while policy makers in all four provinces repeatedly called on these provincial SOEs to acquire private mines in order to solve the accident problem and "grow big and strong" (做大做强), in fact very few such acquisitions happened in these years, as SOEs proved reluctant to pay the prices privates demanded, and provincial authorities were as yet unwilling to enforce nationalization (Section 4.7.1).

Section 4.7 also discusses the special case of Inner Mongolia. Like the other provinces, IMAR in the 2000s, too, placed great emphasis on cultivating large-scale coal companies. But unlike the other provinces, IMAR had no SOEs of its own and instead from a very early date sought to develop and support large *private* companies in coal and other heavy industries. Because IMAR's coal industry has quite a different structure to those of the other provinces, and because these differences are of relevance to the further story told in this chapter and in Chapter 5, Section 4.7.2 provides a brief overview of the evolution of IMAR's coal industry.

Section 4.8 turns to regulatory changes. From the mid-2000s onwards, the regulatory regime related to coal mining was tightened significantly, with the objective of clamping down on small, unsafe or illegal TVMs. Central-state pressure and policy initiatives played an important role in this, though actual execution – including scope for defining specific standards – rested with the provinces and localities. This is discussed in Section

4.8.1. But the regulatory initiatives of these years were not solely an effort to restrict the TVMs. Reforms were also made to remedy the legal uncertainty many privates confronted and give them a clear and dependable legal title to their mines – i.e., to *strengthen* that sector. This is discussed in Section 4.8.2, primarily with reference to Shanxi. The reason for the focus on Shanxi is that while these reforms were ultimately rolled out nationwide, they were pioneered in Shanxi, and their development and implementation is best documented for that province. That they were initiated in Shanxi is important because it shows that even there, nationalization was never a foregone conclusion, but was adopted only after other policy measures (such as this effort to improve mine owners' incentives and thereby sector performance) had failed to stem the flood of big accidents.

Section 4.9 looks at how, up to 2008, the provinces implemented what, as we saw in Chapter 2, was the core central-government demand with regard to the TVM sector: reducing the total number of mines, preferably through closures or consolidation under SOEs. Yet even though the provinces had themselves called on their SOEs to acquire TVMs, in practice this did not happen on a significant scale. The provinces proved unwilling to force this on unwilling local governments and private owners, and reluctant SOEs. Instead, they generally opted for “local consolidation”, that is, enforcing mergers *between the private mines themselves*. Thereby core central demands could be met at least partially (fewer mines, improved safety), even while the private sector was preserved and local-government interests thus accommodated.

4.7 Building Up Provincial Coal SOEs

Until 1998, all of China's large state mines (the “key state-owned mines”) were owned and supervised by the Ministry of the Coal Industry. That year, however, the industrial line ministries were abolished as part of Zhu Rongji's administrative reforms, and ownership of all but two of the central-state mining companies was passed to the provinces. As Tim Wright has noted, this was a two-edged gift, since most of the mines in question were loss-making and burdened with heavy social-expenditure commitments. Few foresaw the coal boom of the 2000s, which would somewhat revive their fortunes. Having received these mines, however, all case-study provinces – except for Inner Mongolia – in the early 2000s began adopting measures to strengthen them, with a view to turning them into provincial champions that could drive regional coal-industry development.

4.7.1 Building up Provincial SOEs in Shanxi, Henan, Shaanxi, and Guizhou

The state mines the provinces received in 1998 were not so much firms in a Western sense, as production organizations geared to the requirements of the planned economy.

This was even reflected in their name: they were traditionally referred to as “coal mining bureaus” (矿务局). The first step towards strengthening these entities was therefore to corporatize them – to turn them into firms, often with a view to eventually listing them on the domestic stockmarkets. This commonly involved extensive restructuring and consolidation *within* the provincial state coal sectors, as provinces sought to carve out viable corporate groups from the diverse planned-era entities they had inherited and minimize socio-political fall-out from bankruptcies or lay-offs. Thus in 2004 Shaanxi merged all of the 10 coal-mining bureaus and specialized mining-service firms that constituted the provincially-owned state coal sector in Shaanxi into a single provincially-owned enterprise, the Shaanxi Coal and Chemicals Industry Group (陕西煤业化工集团). In 2008, a subsidiary was listed on the Shanghai stock market. Similarly, Henan in the mid-2000s restructured and merged its provincially-owned state mines and related entities, eventually creating five large state coal groups with listed subsidiaries. Shanxi, too, created seven provincial coal enterprises from the various provincial mining bureaus, again with listed subsidiaries, and Guizhou created three, of which one has sofar been listed.

These mergers often involved the coal SOEs acquiring additional capabilities in power generation, coal refining/coal chemicals, or equipment production, as provinces sought to extend the range of coal value-chain activities undertaken within their boundaries. All case-study provinces (including Inner Mongolia) were highly concerned that their coal industries graduate from resource extraction to higher value-added, more technologically advanced downstream activities, in particular power generation and coal refining (coal chemicals), and that these activities be integrated within individual enterprise groups. As we saw in Chapter 2, central officials shared this desire, and like the Center, the provinces too seem to have generally regarded the large SOEs as the best actors to undertake these activities on account of their technological sophistication, access to capital, and willingness to undertake what seem to have often been financially risky projects.

These actions were in line with state-sector reforms carried out across the country after the mid-1990s, as well as with the *Tenth and Eleventh Five-Year Plans for the Coal Industry*, which had both called for consolidation within the state coal sector.⁵⁰ Of interest here is that by the mid-2000s provincial policy makers in all four provinces – Shanxi, Henan, Shaanxi, and Guizhou – seem to have viewed these firms as the key drivers of coal-industry development and hoped that they would gradually expand the role they played in the provincial coal industry. They all expressed the same developmental vision: each province’s coal industry was to become dominated by a small number of large, modern and state-owned coal firms, which would also integrate downstream activities, in addition to coal mining. This is important because it suggests that Shaanxi and Guizhou’s failure to follow Shanxi and Henan’s eventual decision to re-

⁵⁰On corporatization of Chinese energy SOEs generally see Lin (2006, 2008) and Steinfeld (2010: pp. 257 – 267)

nationalize the industry under these provincial SOEs was *not* due to any fundamental philosophical or ideological differences in their approaches to economic development, but to some other factor – such as, perhaps, the higher political pressures the former faced over accidents.

Thus Shanxi's *Eleventh Five-Year Plan for the Coal Industry* called for creating two "extra-large" and three to five "large" coal enterprise groups with, respectively, 100 million and 50 million tons production capacity each (Shanxi 2007b), and Shanxi officials told the People's Daily that since 2004, Shanxi had "energetically implemented a large enterprise, large group strategy" to develop the province's coal industry (PD 2005a). In 2006, Shanxi governor Yu Youjun reiterated that building up "large-scale coal groups" was a priority (Yu 2006). "Large-scale enterprises" can in this context be treated as a synonym for the large provincial SOEs.⁵¹ Indeed, both the *Eleventh Plan* and other documents issued by the Shanxi government in 2004 and 2005 explicitly "encouraged" (鼓励) the "large-scale coal SOEs" to use the government-promoted industry consolidation as an "opportunity" (机遇) to acquire local (i.e. private) mines in order to "grow big and strong" (做大做强) (Shanxi Coal Industry Bureau 2004, Shanxi 2005a, 2006).

Henan's *Eleventh Plan*, too, called for constructing several 100 million ton-sized coal groups and "rapidly creating a provincial coal production and development structure in which the large-scale backbone enterprises play the main role" (以大型骨干煤炭企业为主体的全省煤炭生产开发格局). The chief of the Henan Coal Industry Bureau explicitly identified these "backbone" enterprises as being the (provincial) Key State-owned Mines (Li 2008: p. 134). According to an internal report from the (central) Work Safety Agency, the Henanese leadership had already in early 2004 begun calling for these "provincial backbone enterprises" to acquire small mines. The ambition was that ultimately they would control 80% or more of Henan's coal production (SAWS 2006b; cf. 21 *CBH* 2007a).

These statements could be read as suggesting that the nationalizations that began in Shanxi and Henan in 2009 and 2010 were an inevitable outcome and their timing perhaps no more than the gradual working-out of a carefully prepared plan. Yet as shown in Sections 4.9 below as well as in the next chapter, prior to 2008 even in Shanxi and Henan meaningful moves to have provincial SOEs take over the local private mines either simply did *not* happen (Shanxi), or seem to have been attempted but made only limited progress (Henan). Even though provincial governments had reasons to prefer an SOE-dominated coal industry, under ordinary circumstances, it seems, the practical obstacles and countervailing forces were too great than to allow this to be realized within the short or even the medium term. This would only change with the extraordinary circumstances of the growing public-opinion crisis over accidents.

⁵¹These were the largest firms in the province, and indeed their number – seven – matches the number of "large" and "extra-large" enterprise groups envisioned in the Shanxi's *Eleventh Five-Year Plan*.

This general preference for SOE ownership of coal was not limited to Shanxi and Henan. We find very similar language extolling the role of large SOEs also in Shaanxi and Guizhou's *Eleventh Five-Year Plan*. The "guiding principle" (方针) of Guizhou's *Eleventh Plan* defined "cultivating (培育) large-scale coal enterprises and enterprise groups" as the "main line" (主线). Swiftly establishing several backbone enterprises and groups with more than 10 million tons production capacity that could serve as the "main force" (主力军) for "optimizing industry structure" was laid down as a key task for the period through to 2020. These large enterprises were encouraged to acquire local small mines to consolidate the industry (Guizhou 2007). Again the *Plan* made clear that it was above all the provincial SOEs that were to serve as these "backbone enterprises": the Panjiang (盘江集团) and Shuicheng Groups (水城集团) were both to reach 30 million tons production capacity; other key state mines were to reach 10 million tons (Guizhou 2006c: pp. 56, 62; Guizhou 2007). Shaanxi's *Eleventh Plan*, too, defined "cultivating large-scale coal enterprise groups" as the "main line". In particular, this required "making the [state-owned] Shaanxi Coal and Chemicals Group big and strong". The firm was to acquire small mines for this purpose. Key state-owned coal companies were to "act as the main force" (发挥主力军作用) for developing Shaanxi's coal industry (China Coal Processing and Utilization Association 2007, *Shaanxi Daily* 2006, cf. Wang S. 2008). Both in Shaanxi and in Guizhou, interviewees argued that the provincial governments generally preferred large SOEs – especially those they owned themselves – to develop their coal industries (Interviews 57, 58, 63, 72).⁵²

On one level, the above-quoted language from the *Plans* reflected central-government priorities. As we saw in Chapter 2, from 1998 onwards national leaders and authoritative central policy documents had consistently called for coal mining to be consolidated under large, preferably state-owned, enterprises. Naturally, provincial policy documents would conform to this. Yet having the large provincial SOEs dominate their coal industries also offered the provincial authorities advantages. Thus there is no reason to doubt the sincerity of this expressed provincial policy preference, especially as the just-cited interviewees also confirmed it.

Interviewees gave several reasons for why provincial authorities would prefer having SOEs, especially their own SOEs, develop a profitable and for these provinces, strategic industry like coal. Firstly, given their higher technological capacities and greater access to capital than most privates, SOEs were viewed as better able to carry out large projects that spur GDP, while also minimizing the risk of serious, career-derailing accidents. They were also considered to be most able to carry out the very capital-intensive coal value-chain integration (electricity production, coal refining) that policy makers were eager to see. Secondly, as one central-government interviewee stressed, SOEs provide their principals with an especially useful source of patronage, because

⁵²Guizhou businessman and former Guizhou coal bureau official (57, joint interview), Guizhou journalist (58), economists from Xi'an who consult for provincial and local governments in Shaanxi (63, 72).

they can *legally* give their employees very generous compensation and benefits packages (Interview 44).⁵³ Thirdly, consolidation of the industry under provincially-controlled companies was seen as a way to increase provincial influence over national coal prices (21 CBH 2004b). Fourthly, in the words of several interviewees, the (provincial) SOEs could be relied upon to be “obedient” (听话, 服从) to the provincial government. In particular, they would also undertake tasks that offered little profit, if the government requested this of them. Interviewees referenced cases of major coal SOEs investing in coal refining, tourism and culture industries, selling coal at below-market prices, and retaining excess employees as examples of provincial governments using their SOEs to carry out projects they thought politically or socially desirable that privates would not have done (Interviews 44, 63, 70).⁵⁴ During the Financial Crisis, Shaanxi (like the national government) relied on its state firms – in particular its energy and mining SOEs – for crisis-fighting measures, by ordering them to go on investment sprees. Shaanxi officials apparently considered this to have been a considerable success, and concluded that in future they ought to rely more, not less, on the SOEs to drive rapid industrial development (EO 2012c).

4.7.2 The Inner Mongolian Exception: Large Private Enterprise Groups

IMAR’s coal industry consists of two very different regions; Eastern Inner Mongolia, where the coal reserves mainly consist of relative low-value lignite (brown coal), and the Ordos basin in Western Inner Mongolia, which has one sixth of China’s total reserves of steam coal, much of which is of high quality and is deposited in large, shallow fields suitable for large-scale open-cast mining. There is also some coking coal (Fenwei 2009). The region is however also one of the most remote parts of China, and thus the Ordos basin coal remained largely untapped until the 2000s. By contrast, coal in eastern Inner Mongolia was developed from the 1950s onwards, mainly by smaller provincially and locally-owned state enterprises. Because of lignite’s lower value, investment and industry growth in the east slowed in the 1990s and 2000s. The region became increasingly peripheral and instead Ordos and Wuhai in Western Inner Mongolia emerged as the center of IMAR’s coal industry in the 2000s. What state companies existed in the east were privatized or sold off to central-state electricity companies. (Interviews 10, 62, 66, 67, 81⁵⁵; 21 CBH 2009b; Northeast Securities 2010) .

⁵³Official from the Ministry of Science and Technology who was closely involved with a large-scale coal energy investment project. Provincial leaders can of course also provide their followers with jobs in provincial or local government. But while these can enable graft, legal compensation is apparently much more strictly controlled, and significantly lower, than in the SOEs, especially those in profitable industries.

⁵⁴Official from Ministry of Science and Technology who was closely involved with a large-scale coal energy investment project (44), Shaanxi economist (63), Shaanxi correspondent of a major national paper (70).

⁵⁵Economists from a Beijing university (10) and a university in Hohhot (66), former Inner Mongolian provincial-government official (67), former coal-mine owners A and B from Inner Mongolia (62, 81)

CHAPTER 4. COAL-INDUSTRY CHANGE IN FIVE PROVINCES, C. 1995 - 2007. POLITICAL ECONOMY AND POLICY

Until the coal boom of the 2000s turned it almost overnight into one of the fastest growing parts of the country (with a per capita GDP that temporarily surpassed Hongkong's), Western Inner Mongolia was very poor with little industrial development and, in particular, little state-owned industry. Ordos City and its subordinate counties (旗) had owned a small number of state industrial companies, including coal companies, but most of these were privatized in the 1990s. There were no provincially-owned SOEs active in the area. Centrally-owned Shenhua was present in Ordos from an early date, but until the late 2000s no other centrally-owned SOEs appear to have invested in Western IMAR.

As a result, the region underwent a distinctive industrialization process in the 1980s and 1990s, focused on developing township and village enterprises (TVEs). Like in much of the rest of China, these TVEs seem to have often been set up by local officials who "jumped into the sea" (下海, i.e. turned private businessmen) or by their friends and relatives. Financing probably often came from a mix of private and local-state sources, but, as elsewhere, with controlling ownership gradually shifting to the private side in the 1990s – if it was not located there from the start. Because there was little locally or provincially-owned state industry to compete with them for patronage from the IMAR authorities, these firms enjoyed extremely close and supportive relations with the local and regional authorities. Together with the favorable resource and market environment of the 2000s, this led to the development of very big private coal firms in Inner Mongolia (Interviews 10, 62, 67, 81⁵⁶; 21 CBH 2007b, *China Times* 2011b, Northeast Securities 2010). Similar to the other case-study provinces' emphasis on building up their SOEs as provincial champions, IMAR in the 2000s placed great emphasis on cultivating these large-scale albeit private coal companies, a theme emphasized in its own *Eleventh Plan* (Wang W. 2008).

The annual All-China List of the Largest 500 Private Enterprises (中国民营企业500强) is suggestive of the distinctiveness of IMAR's coal industry.⁵⁷ The list categorizes firms by business areas. I was unable to obtain the lists for 2008 and 2009 broken down by business areas, but in the lists for 2007 and 2010 through to 2014, a total of 21 firms appear in the coal-mining category. Of these, 14 (66%) were from Inner Mongolia. Moreover, the Inner Mongolian firms show the greatest stability: none of the seven coal firms from other provinces appear in the lists in more than one year, but all but two of the Inner Mongolian firms appear at least in two years and most appear in several (All-China Federation of Industry and Commerce 2008, 2011, 2012, 2013, 2014, 2015).

Two pertinent examples of this evolution are Yitai (伊泰) and Yidong (伊东), China's largest and second-largest private coal companies with around 50 and 34 million tons production capacity in 2012. In the 1980s, Yitai's founder, Zhang Shuangwang (张双

⁵⁶Economist from a Beijing university (10), former Inner Mongolian provincial-government official (67), former coal-mine owner B (81)

⁵⁷The list is put together annually by the All-China Federation of Industry and Commerce, with firms ranked according to operating revenue (营业收入总额).

旺), who continues to serve as chairman of the company, was a local official in Ordos.⁵⁸ In 1988, he received US\$67,500 in loans and grants from the government (from which level is unclear, but probably the municipality) to start what became Yitai (*New York Times* 2010). In 1997 the firm was reorganized as a joint-stock company under the control of Zhang and a group of 30 senior employees, who took 54.64% of the shares (holding these via a wholly-owned investment vehicle, Yitai Investment Co., at least nominally on behalf of a group of over 2000 employees of Yitai).⁵⁹ All remaining government claims on the company were liquidated in 2001 (*CYD* 2007) and through to 2015, Zhang and the group of 30 have retained around 54% of the total stock of Yitai (Inner Mongolia Yitai 2009, 2012, 2014).

Despite the liquidation of the state share of ownership, Yitai has nevertheless retained very close links to the government, including, probably, at the provincial and national level, something indicated by its inclusion in IMAR's list of "Key Coal Enterprises" (see below) as well as by its ability to obtain permits for constructing and operating its own rail line and for a large coal-to-oil project (a restricted technology in China). It appears that Yitai – like other large and well-connected Inner Mongolian privates – was also one of the big winners from coal-mine consolidations in the mid- and late-2000s that are the topic of Section 4.9 and of the next chapter, as local and provincial authorities sought to build up viable local champions.

While Yitai seems to have been a private or at least collective (集体) company from the start, Yidong began life as a county-owned SOE, the Zhunge'er County Coal Industry Company (准格尔旗煤炭工业公司成), also located in Ordos. By 1998 it was making losses of RMB 2 million a year (a substantial amount in those days, especially in an area as poor Ordos) and the county government turned a portion of the stock over to the firm's employees and management, which was then headed by Yang Erxi (杨二喜). Like Yitai's Zhang, Yang had previously served as a local official, including as director of the county coal-industry bureau. Due to the then-depressed coal market losses continued to accumulate, and in 2000 the government handed the rest of the stock over to the employees, with Yang and the other board members (董事会) assuming control of the company (*China Entrepreneur* 2010, *China Economic Weekly* 2012). When coal prices rebounded in the early 2000s, sales soared, and by 2007 Yidong had entered the "All-China List of Largest 500 Private Enterprises", gradually rising to spot 131 in

⁵⁸According to his entry on Baike Baidu (China's Wikipedia), his last position prior to starting what became Yitai was deputy head (副处长) of the Ordos township and village enterprise bureau; speaking to the *New York Times* in 2010 Zhang himself only spoke of having been a "low-level government official".

⁵⁹The other 45.36% of the shares were sold on the Shanghai Stock Exchange as "B" shares, that is, shares tradeable only in foreign currency by foreign investors. Why Yitai opted for selling B instead of A shares (which are tradable in RMB, by PRC investors, and trade at a significant mark-up to B shares) is unclear, but likely reflected an effort to obtain the politically-valuable status of a foreign-invested enterprise (cf. Huang 2002, 2008). As of 2009, no entity or individual other than the group around Zhang held more than a few percent of floating stock (cf. Inner Mongolia Yitai 2009, 2012, 2014).

2012, from spot 407 in 2007 (All-China Federation of Industry and Commerce 2008, 2012, 2013). Again, the company maintained close relations with local and probably provincial authorities, and in 2012 Yang told a journalist that even though coal prices were falling fast, the company would neither reduce production, nor lay off workers or cut salaries (except those of the top management) because

without government support, it would have been impossible for our company to grow as large as it has ... [therefore], in the current crisis situation [in the coal market], we must actively give the government face and take on responsibility. I will act as an entrepreneur, and not as a coal boss.(在这个时候应该主动为政府长脸，该担的责任是一定要担的，要做企业家，不能做煤老板.) (*China Economic Weekly* 2012).

To the extent discipherable, the corporate histories and structures of other large coal companies from Western Inner Mongolia show similar patterns. Thus the Manshi (满世煤炭集团), Huanghe (黄河工贸集团), and Haishen Groups (海神煤炭集团) began as small-scale private TVEs or even as “individually-operated” enterprises (个体户) in the 1980s and early 1990s (Manshi Group n.d., *21 CBH* 2012a, Inner Mongolia Haishen 2008), while the Huineng Group (汇能煤电集团) is apparently owned by some 800 individuals including “social elites, ordinary workers, herders, and laid-off workers” (Qinhuangdao Coal Net 2009). The Yuanxing Group (远兴集团) underwent a series of complex stock transactions that saw formerly state-owned shares held by the Ordos municipal government gradually transferred to the private Boyuan Group (博源集团) (Inner Mongolia Yuanxing 2011). All of these firms had by the late 2000s made it into the All-China Largest-500 or the All-Inner Mongolia Largest-100 Private Enterprises lists, and were listed as Key Enterprises by Inner Mongolia (IMAR Science and Technology Bureau 2010). Though I have no direct evidence for this (beyond a local mine owner’s oblique remarks about the “complicated background” of Ordos’ large private firms quoted in *21 CBH* 2012b), given the deep involvement of local and provincial officials as private shareholders in the coal-mining firms in the other provinces, it is very likely that also in IMAR current or former local and provincial officials (or their relatives) often held personal stakes in these firms, thus further deepening their connections to the government.

With the coal boom, investment by central SOEs and key state firms owned by other provinces increased rapidly in Western IMAR after c. 2005/2006, something visible in the rapid rise in output from the key state mines (cf. Part I, Figures 4.5 and 4.6), but the available untapped resources were so plentiful as to leave plenty for private development. The sheer amount of coal resources available for development seems to have made the local and the provincial government in Inner Mongolia more welcoming than most other localities towards investment from “outside” SOEs owned by the Center or other provinces. However, for the reasons discussed, they too wanted to have strong

locally-owned firms and were concerned to avoid falling into dependence on the outside SOEs. Without SOEs of their own, Inner Mongolian local and provincial authorities therefore focused on building up the *private* companies as local champions.

There are two good indicators of this support. Firstly, local (and probably provincial) authorities seem to have used the coal-mine consolidation campaigns of the 2000s to systematically strengthen these companies by enabling them to acquire additional coal mines and concessions and thus grow larger. Secondly, in 2008 Inner Mongolia designated 30 enterprises as “key coal-mine companies” (重点煤炭企业) which were to enjoy special policy support. Of these firms, 14 were local private firms, 15 were central-state SOEs. (I was unable to identify the ownership of one firm.)⁶⁰ No other province, to my knowledge, has ever given a significant number of private energy companies a comparable designation as officially-favored enterprises.

4.8 Tightening and Modernizing Regulation

4.8.1 Regulatory Tightening

Figure 4.13 presents graphically the number of regulatory and policy ordinances (*Notices, Opinions, Decisions*; 通知、意见、决定) concerning mining safety, equipment and mine-construction standards, inspections, industry structure (i.e., closures and consolidation), and licensing and qualifications for key workers that were issued annually by the provincial governments and the State Council from 1990 to 2013.⁶¹ Table 4.2 presents the total and average annual number of ordinances issued in three time periods; 1990–1997 (i.e., prior to the Center’s first turn against the TVMs), 1998–2004 (the period of the late-1990s Closure Campaign and the subsequent industry revival), and 2005–2013 (the years from the release of the Hu-Wen administration’s major coal-related policy documents and the period when large-scale consolidation and nationalization was carried out).

⁶⁰For the full list of firms, see Appendix. Ownership structures were mainly identified via analyses of company websites. Firms that belonged to centrally-owned enterprise groups like Shenhua or the power producer Huaneng generally stated as much on their website and usually bore the name of the parent group company in their name. Firms that were coded as private when they either self-described as private (民营) or listed prizes and honors that they had won that were restricted to privates, e.g. “Top 100 Private Firms in Inner Mongolia” (内蒙古民营企业一百强). Given the financial and bureaucratic discrimination private firms face, it is very unlikely that a state firm would describe itself as private in its publicity materials.

⁶¹The data were collected from the Peking University *Law Info China* database (<http://www.pkulaw.cn/>) through title-only (标题) searches using the search terms “coal mine” (煤矿), “coal industry” (煤炭工业), “coal resources” (煤炭资源), “mineral resources” (矿产资源). The results were then hand-coded to exclude hits unrelated to safety, inspections, equipment and construction standards and upgrading, industry structure, and licensing and qualifications.

Time Period	Henan	Shanxi	Guizhou	Shaanxi	IMAR	State Council
1990 - 1997	0.625	0.5	0.25	0.125	0.5	0.75
1998 - 2004	1	3.6	1.1	2.7	2.4	2
2005 - 2013	6.6	7.6	7	5.8	3.4	2.4
Total, 1990 - 2013	71	97	73	72	52	42

Table 4.2: Average Number of Ordinances Issued per Year in Different Time Periods

Source: Law Info China (<http://www.pkulaw.cn/>)

As the Figure and Table show, the volume of regulation increased substantially over the period, in particular from 2005 on. While the provinces had issued, on average, less than one ordinance every year prior to 1998 and only two in the following seven-year period, in the years from 2005 to 2013 they issued six a year on average. Shanxi issued the most, with 92 documents in total, and IMAR the fewest, with 52. The other three provinces issued almost the same number (71 to 73 each). The number of State Council documents issued shows a similar if less dramatic increase.⁶²

Underscoring the role of accidents in driving policy forward, almost half of the State Council documents (18 out of 42) were issued between 2004 and 2006 – the three years with the highest levels of media coverage of accidents. 2005 in particular both saw the most State Council documents issued during the period, and more very big accidents (50 or more fatalities) than any other year (cf. Wright 2012: p. 159) as well as the highest annual level of media coverage (cf. Figures 3.1 and 3.2 in Chapter 3).

These broad patterns in the data are consistent with the evidence from interviews. Interviewees in Guizhou and Shaanxi claimed that from 2005/2006 onwards, both provinces had significantly tightened regulatory controls over the industry. Inspections of mines were stepped up, new mining licenses and concessions could almost only still be obtained from provincial (and central) authorities, and it became increasingly hard for small firms to get new concessions, though large private mining companies could still do so. Interviewees linked this tightening to growing political pressure from the central government over accidents and, to a lesser extent, environmental destruction (Interviews

⁶²The greater total number of documents issued by the provinces compared to the State Council is explained by the fact that State Council documents are rarely concerned with detailed – and document-intensive – implementation (the job of the provinces and the ministries), focusing instead on setting out the overall strategy.

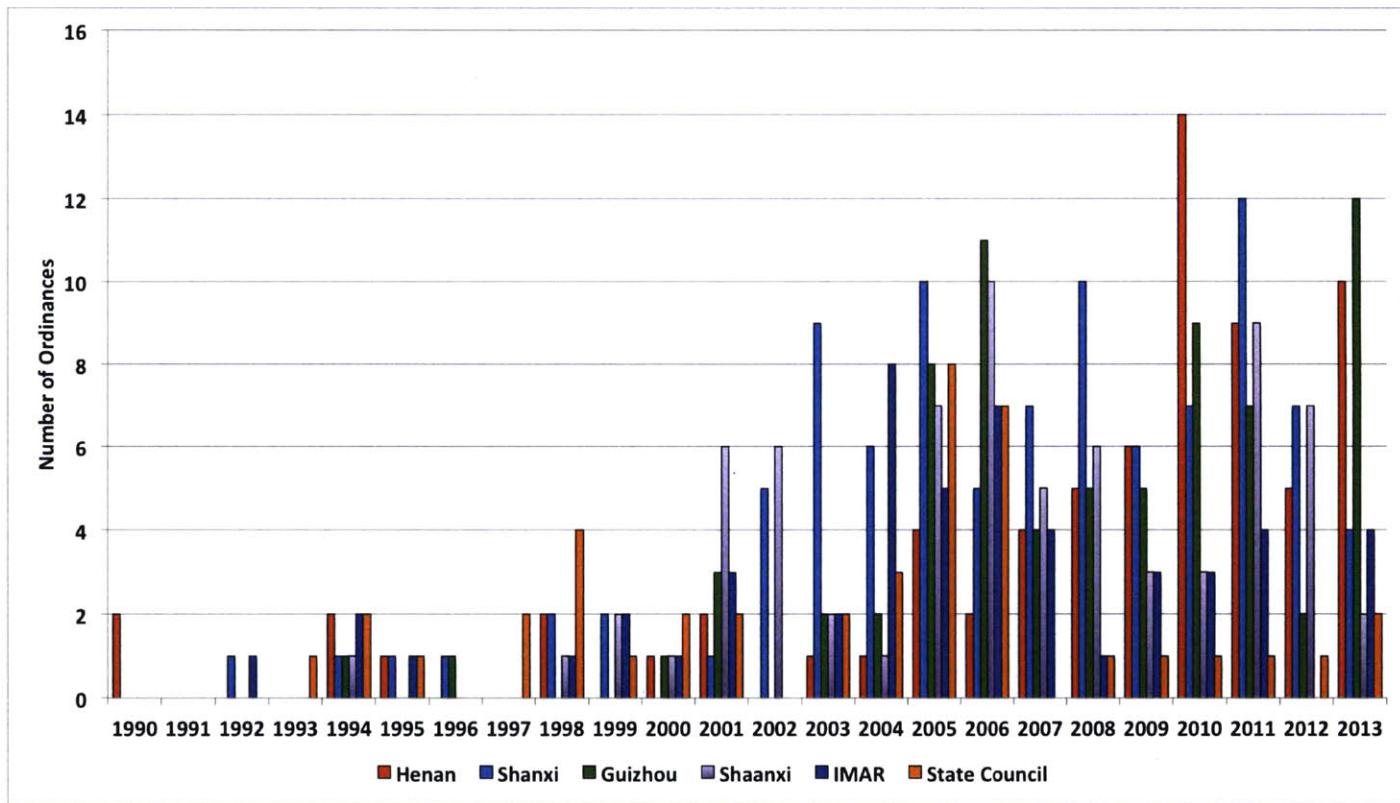


Figure 4.13: Regulatory Ordinances Related to Mining Safety, Equipment and Construction Standards, Inspections, Licensing and Qualifications, and Industry Structure Passed from 1990 to 2013

Source: Law Info China (<http://www.pkulaw.cn/>)

CHAPTER 4. COAL-INDUSTRY CHANGE IN FIVE PROVINCES, C. 1995 - 2007. POLITICAL ECONOMY AND POLICY

56, 57, 58, 70, 72).⁶³ Strikingly, two interviewees suggested that the many accidents in Shanxi led to pressure also on other provinces to tidy up their mining industries, too (Interviews 79, 81).⁶⁴

As suggested by the high number of ordinances issued by Shanxi already from 2002 on (cf. Figure 4.13 and Table 4.2), in Shanxi regulatory oversight seems to have been tightened earlier than elsewhere. The first major round of inspections and closures of sub-standard TVMs was launched in August 2003 – indicatively, after a string of large accidents had occurred about which the then-governor, Liu Zhenhua (刘振华), was ordered to give the State Council a personal report. Indeed, consistent with this early tightening and the higher total number of ordinances issued in Shanxi than elsewhere, interviewees repeatedly claimed that the regulatory regime in Shanxi was especially strict. It is easy to see the likely link to the province's particularly severe accident and publicity/media-coverage problem.

Conversely – and again consistent with the lower total number of ordinances issued – the regulatory regime of IMAR was repeatedly described as particularly relaxed (Interviews 20, 71 79, 81, *China Newsweek* 2010).⁶⁵ One former mine owner went so far as to claim that in IMAR local authorities – and thus local business people – could often all but ignore national regulation, both in mining and in other economic sectors (Interview 80).⁶⁶ Interviewees attributed this to Inner Mongolia's status as a minority region, claiming that provided it did not jeopardize national security, Beijing routinely tolerated significant regulatory “flexibility” in minority regions, especially if this helped develop their economies. Nevertheless, interviewees emphasized that, also in Inner Mongolia, oversight was tightened substantially after about 2005 and especially after 2011, when simmering conflict between ethnic Mongolian herders and the mostly Han-owned coal industry over environmental destruction exploded into open protests (cf. *Economist* 2012). At this point it became increasingly hard for ordinary people and companies – i.e. those that had not *already* grown very large and/or had very strong connections – to get new mining concessions (Interviews 62, 67).⁶⁷ Moreover, as we will see in Section 4.9.2, there are indications that from 2005 on, Inner Mongolia's subprovincial authorities implemented particularly aggressive local-level consolidation, using this policy measure

⁶³Senior engineer from a Guizhou coal-mining research institution (56), Guizhou businessman and former Guizhou coal bureau official (57, joint interview), Guizhou journalist (58), Economist from Xi'an (72), Shaanxi correspondent of a major national paper (70).

⁶⁴Journalist from northern Shaanxi specialized on energy topics (79); former coal-mine owner from Inner Mongolia B (81)

⁶⁵Chinese scholar who has worked extensively on the coal industry (20), chief engineer at a Shaanxi coal-design institute (71), Journalist from northern Shaanxi specialized on energy topics (79), Former coalmine owner B from Inner Mongolia (81)

⁶⁶Specifically, he referred to authorities being more tolerant of mines that did not have all their papers in order than was common elsewhere, and to the region's very large – but technically illegal – informal financial industry, which had played a large role in IMAR's coal boom and was also tolerated.

⁶⁷Former coal-mine owner from Inner Mongolia A (62), former provincial-level official from Inner Mongolia and Ordos real-estate developer (67, joint interview)

to build up very large local firms, a point stressed also by interviewees (Interviews 62, 67, 79, 81).

I was unable to interview people with expertise about Henan's coal industry about the specific issue of regulatory tightening, but the relative number of ordinances issued in the three time periods in Henan strongly suggests that patterns in Henan were not materially different to those in the other provinces: in the time periods 1990 to 1997 and 1998 to 2004, the province issued a total of five and seven regulatory documents, respectively, but in the years from 2005 to 2013, it issued 59.

Shanxi's 2003/2004 province-wide campaign to "halt production and carry out rectification" provides a good flavor of the content of the regulatory tightening carried out across the country in the mid- and late 2000s. All TVMs in Shanxi were ordered to halt production and undergo inspections and "rectification". Production was only permitted to resume once they met standards, something county and municipal leaders had to guarantee on pain of being held responsible for any accident that occurred within one year. Mines that lacked gas detectors, whose managers failed to attend safety training or failed to provide training to their workers, that had not posted safety supervisors, failed to earnestly implement "rectification", or were smaller than 30,000 tons production capacity were to be permanently closed unless they could make the necessary changes by year end. While most inspection was carried out by municipal and county authorities, provincial teams made spot checks. (Shanxi 2003a, 2003b, 2004c).

Further province-wide inspections of this type were carried out in subsequent years, with particular attention now also given to whether mines had current permits. Some 4000 to 5000 "illegal" mines (i.e., those that lacked papers) were claimed to have been shut down in 2005 and 2006 (*21 CBH* 2006a, Interview 35⁶⁸). (Whether these production facilities really were permanently closed is less clear: it would not be surprising if many were in fact simply merged with other mines during consolidation [see below] or reopened once the missing papers or other requirements were obtained – or once the inspectors had left.) In 2004 and 2005 Shanxi also further raised minimum size requirements. New mines now had to have a production capacity of at least 300,000 tons and were ordered to "mechanize mining techniques" (机械化开采) (Shanxi 2004c). In the major coal-producing counties all existing mines with less than 90,000 tons capacity were to be closed (Shanxi 2005a). Mines had to have multiple safety exits as well as pressurized ventilation systems, and longwall mining was increasingly made obligatory (Shanxi 2006). The province also adopted other measures to encourage safer mining practices, such as increasing the amount of compensation owners had to pay the bereaved in the event of fatal accidents, obliging mine operators to lodge a safety deposit (安全风险抵押金) that they would lose in the event of fatal accidents, and ordering senior mine leaders to accompany workers underground on a regular basis.

⁶⁸Economists from the Shanxi Academy of Social Sciences

From 2005 onwards, the other provinces carried out similar initiatives: inspections became far more frequent, efforts to close (or merge) illegal or substandard mines were stepped up, mine operators and workers were asked to undergo further training, safety deposits and higher compensation payments were instituted, and minimum-size requirements were set and repeatedly raised.

The timing of this regulatory tightening is significant, because it indicates that change was being driven not simply by the Center, but by the interplay of accidents, media coverage and resultant central pressure. As discussed in Chapter 2, as early as 1994 central authorities had pushed for stronger regulation and supervision of the township and village mine sector, and the *Tenth Five-Year Plan*, published in 2001, had amplified this. Yet as we just saw, it was only in the second half of 2003 that Shanxi actually launched a serious campaign to inspect and close substandard mines – indicatively, after three major accidents had occurred within one week, prompting high levels of media coverage and central intervention (cf. Shanxi 2003a) – and in the other provinces oversight seems to have only begun to be seriously tightened from about 2005 onwards – four years after the *Tenth Plan* had urged tighter regulation, but the very year that saw more big accidents and more media coverage than any other, and a renewed flurry of central-government documents pressing for getting accidents and general chaos in the coal industry under control.

Thus, in the summer of 2005 the Center decreed a national campaign to “resolve the small-scale coal-mine problem (小煤矿问题) within about three years” (i.e. by mid-2008), via a mix of clamping down on illegal and unsafe practices, closing or consolidating small mines, and strengthening safety management and inspections (SCWSC 2006a; cf. State Council 2005d, NDRC 2005). Only at this point, it seems, did Henan, Shaanxi, Guizhou, and Inner Mongolia follow Shanxi’s lead and also launch province-wide inspection campaigns targeting mines that were substandard, illegal, or did not have their licenses in order (Shaanxi 2005a, Henan 2005, Guizhou 2006b, IMAR 2006). More localized but otherwise similar inspection drives took place in subsequent years, often in response to major accidents.

While the 2005–2008 campaign was directed by the Center – with provinces obliged to submit rectification plans and progress reports and follow-up inspections of provincial efforts by central-government investigation teams – the bulk of the inspection work was carried out by the counties and municipalities. Moreover, while national standards were set, in practice provincial and even municipal authorities retained substantial discretion to adapt these to local circumstances. For example, a State Council investigation team complained that even though national regulations required coal mines in Shaanxi to be no smaller than 300,000 tons production capacity after consolidation, the provincial government had refrained from clearly stipulating this in its consolidation plan, and many cities and counties were already working with minimum-size requirements of 90,000 tons. Yulin had even relaxed this to just 60,000 tons. (SCWSC 2006b). Despite this complaint from the investigation team, Shaanxi kept the minimum-size requirement

for mines in Yulin at 60,000 tons (cf. Shaanxi 2007a, Yulin 2008), though the province promised that by June 2008, the “average” size of mines in Shaanxi was to reach 300,000 tons (Shaanxi 2006). Increasing the size of mines required significant investment, and thus keeping the size requirement lower directly favored the private mines because they were smaller and their owners had less easy access to capital than SOEs.

As discussed further in Section 4.9, ultimately the Center’s control over what precisely provinces did with their coal industries was quite limited and restricted largely to defining broad strategic goals and priorities, monitoring mine numbers – which were self-reported by the provinces – and remonstrating when inspection teams discovered irregular practices.

4.8.2 Regulatory Modernization: Selling Mining Rights to Privates

The tightening of the regulatory regime worked to restrict the activities of the TVMs. However, especially in Shanxi significant regulatory changes were also made with the express purpose of giving mine owners clearer and more secure property rights to their mines, in order to encourage them to adopt longer-term strategies for mine operations and investment. This is important because it indicates that also in Shanxi, obligatory nationalization was never a foregone conclusion. Other strategies with (somewhat) less potential for conflict were tried first as a means of getting accidents under control.

As discussed in Part II, Section 4.5.2, until the reforms of the mid-2000s most private mine operators seem to have lacked a clear legal title to their mines. Rather, the mine and the underlying coal was formally owned by a village or township – in whose name the licenses, too, were made out – from whom the private then “leased” the right to operate the mine. As the debates over Shanxi’s reform experiment make clear, Chinese officials and researchers understood the incentive problems flowing from operators’ insecure ownership rights well (see e.g. *China Economic Times* 2007, *Oriental Outlook* 2005).

Reforms pioneered in the mid-2000s in Shanxi sought to change this. Appropriately enough, they were dubbed “clarifying property rights” (明晰产权). Operators who previously had only leased the operating rights to their mines would now obtain a legal mining right (采矿权), as well as all the relevant licenses, made out in their name. In turn, they would have to pay a “resource compensation and usage fee” for the coal to be mined (资源价款和使用费), calculated on an RMB per ton-of-mineable-coal basis, that was supposed to reflect the market value of the underlying resources contained in the concession. They would thereby obtain an unambiguous legal right to mine and to dispose of all the coal in the concession, in perpetuity.⁶⁹ The hope was that this

⁶⁹This structure was adopted because it left the state’s claim to ultimate ownership of all natural resources unaltered, while still giving privates a clear, legally-defendable right to the coal. As a

would disincentivize short-termist and speculative behavior, and encourage operators to mine responsibly and invest in upgrading their mines. (*China Comment* 2007, *China Economic Times* 2007, *Southern Weekend* 2006b cf. Shanxi 2006).

This reform was pioneered in Shanxi, by the then-governor Zhang Baoshun, who was to serve as Shanxi Party Secretary until 2011. It was first trialed in Linfen in 2004, and rolled out across the province in 2005 and early 2006. In September 2006 the reform was extended to eight further provinces, including all the case-study provinces (State Council 2006b). In practice, the reform proved contentious in Shanxi and seems *not* to have been much welcomed by the local coal bosses because the resource usage and compensation fee was levied retrospectively (i.e., mine operators were forced to pay large amounts of money for resources that they were already mining). (It appears that in the other provinces operators were *not* generally forced to make retrospective payments for concessions they already held.)

Multiple motives seem to have lain behind this reform. For provincial policy makers in Shanxi, it presented a plausible strategy to get accidents under control by improving operators' incentives while respecting local governments' interests. For central-government policy makers, it was part of advancing the larger strategic aim of marketizing the allocation of mineral resources, to raise the efficiency of extraction and allocation.⁷⁰ For all parties, of course, it was also a way to increase fiscal revenues. The Shanxi Academy of Social Sciences expected the measure to raise about RMB 90 billion (c. US\$ 13 billion), of which Shanxi was to retain 80%, with 20% passed on to the Center. Around 60% was to remain directly with the municipalities and counties. This was a large amount of money, and officials justified it both with the windfall gains bosses had reaped as the value of their mines appreciated dramatically in the 2000s, and with the costs localities would have to shoulder in future to clean up the pollution unchecked mining had caused (*Southern Weekend* 2006b, *China Economic Times* 2007).⁷¹

Of interest here is, firstly, that provincial officials in Shanxi invoked a logic of property rights in order to explain the reform measure, and secondly the apparent role accidents played in prompting its adoption. Officials argued that a key cause for the frequent

journalist put it, likening the coal to coffee and the mining rights to a mug, while the state would not formally sell you the coffee in your mug, it would sell you the mug – with the coffee in it, for you to drink.

⁷⁰Hitherto, mining concessions had been allocated to firms (of all ownership types) by state agencies in return for a negotiated compensation fee, which in the past had usually been low or even zero. Central-government officials had for a long time wanted to move away from this, towards a system where mining concessions would be allocated to firms via market-based mechanisms like competitive tendering or bidding (cf. e.g. State Council 2005d). The reforms advanced this agenda, as they encouraged the use of market mechanisms for allocating concessions, though they did not mandate it. Interviewees claimed that in practice genuine competitive tendering was rare.

⁷¹Journalists suggested that creating this new income stream for local governments may have also been intended as compensation for the income lost due to closures of illegal mines (*Southern Weekend* 2006a)

accidents, low investment in equipment and low coal recovery rates in Shanxi's private mines lay in operators' rational response to their insecure and ambiguous ownership of the mines. Given their lack of security, it only made sense for them to avoid large investments and run the mines in unsafe ways if this maximized short-term coal production. Conversely, once their long-term control of the mine was guaranteed and they had made up-front payments for the full value of the mineable coal, operators would seek to mine *all* coal (i.e., not just the most-easily recovered portions), thus reducing resource wastage. Because accidents or substandard equipment *would* however threaten their longterm possession of the mine and thus risk their investment (the compensation and usage fees paid) becoming stranded, they would have strong incentives to undertake the necessary investments in equipment and avoid unsafe practices like mining above capacity. (Interviews 9, 35)⁷². This logic was consistently invoked by senior Shanxi officials – including Governor Zhang and his successor Yu Youjun – as well as by researchers from the State Council Development Research Center to justify the reform (*21 CBH* 2005c; *Southern Weekend* 2006b, 2006b; *Oriental Outlook* 2005, *China Economic Times* 2007). It was also encapsulated by the leading slogan (提法) Shanxi put forward to sum up the reform idea, “Owners of Assets have the Perseverance [to Develop the Assets]” (有恒产者有恒心).

Accidents seem to have played an important role in prompting this reform initiative. The initial experiment with the measure in Linfen in 2004 was launched in response to a major accident in the city, in which complicated ownership relations were said to have played a role.⁷³ Media reports portrayed the reform experiment as an on-the-spot decision by Governor Zhang, taken at the accident site in Linfen. The reality was likely more complex. Upon coming into office in January 2004, Zhang had solicited proposals for resolving the problems in the TVM sector, and this particular accident appears to have acted more as a tie-breaker in the debate over whether to experiment with property-rights reform of some kind (*21 CBH* 2006c, *Southern Weekend* 2010).⁷⁴ The larger point, however, is that it was the occurrence of large accidents which drove policy initiatives forward.

⁷²Shanxi journalist who mainly covers energy and environmental topics (9); economists from Shanxi Academy of Social Sciences (35)

⁷³This accident happened on 30 April 2004, and killed 36 miners. The mine in question apparently had four separate shafts, each of which had been leased out to a different boss. The leasees had then further leased their leases out to other people, apparently multiple times. Identifying responsible parties thus became very difficult. (*The Beijing News* 2008).

⁷⁴Unfortunately I have been unable to excavate the details of these debates, and what the competing positions were. At least one major concern appears to have been about the permissibility of selling of state assets (which is what outright privatization of the coal itself, as opposed to the right to mine it, would have amounted to) and the question of how to value concessions. Officials seem to have been intensely concerned that any future appreciation in the value of concessions after the rights to mine them had been sold by the state would leave them open to accusation of causing the “loss of state assets” (国有资产流失). See the references cited in the main text, especially *China Economic Times* 2007.

Ultimately, the reform disappointed, at least with respect to altering privates' incentives and behavior. (The broader goal of marketizing the allocation of mining rights continues to be seen as highly desirable, though it also remains a work in progress.) Substantial revenues were raised – RMB 1 billion in Linfen in the first year alone – and mining safety steadily improved (though it is likely that this was primarily due to the tightened inspection regime and growing investment in safety equipment) but numerous spectacular accidents continued to occur, not least in Linfen. In 2007 the city saw six accidents with a total of 176 deaths. The reform was also unable to put a stop to the specific practices it had been most intended to discourage; viz. frequent transferrals, speculative buying and selling of mines, and mining above capacity (*The Beijing News* 2008, *China Economic Times* 2007, *Oriental Outlook* 2008, *Caijing* 2010a, cf. Li et al. 2009). At least in Linfen (but almost certainly elsewhere too), the process through which private operators obtained their mining rights also proved a breeding ground for corruption, and by 2008 the experiment was discredited (*Oriental Outlook* 2008).

The reason for the apparent failure of property rights reform to alter bosses' behavior is straightforward. At the heart of mine owners' insecurity lay not just tangled ownership claims, but state authorities' power to arbitrarily shut them down, and their track record of doing so. Any mine owner operating in 2005 or 2006, when "property rights clarification" was extended across Shanxi, will have been highly aware of the Center's 1998 TVM closure campaign and its continued hostility towards the sector, of Guangdong's abrupt decision to end all coal mining in 2005⁷⁵, of Shaanxi's obligatory nationalization of private oil wells in 2003, and of the continued practice of many provinces and localities of ordering "production stoppage and rectification" for *all* mines in a locality whenever accidents happened. Across the country, moreover, Center and provinces steadily raised the required minimum scale of mines throughout the 2000s, threatening all who were unable to meet the requirements with closure or obligatory consolidation. "Clarifying property rights" by itself did not alter these realities, and thus did not change mine owners' basic incentives.⁷⁶

Nevertheless, this experiment with property-rights reforms as a way of resolving the problems in the private coal-mining sector is very significant for the argument of this

⁷⁵Guangdong had up to then had a small coal industry entirely made up of private or collective (集体) TVMs. In August 2005 a major and very intensively covered accident killing over 100 workers occurred. Thereupon, the provincial government permanently closed all coal mines in the province (Wright 2012: pp. 120, 123)

⁷⁶Officials and scholars from Shanxi quoted in the Chinese press almost never discussed this aspect of owners' insecurity. Instead, they focused on the prevalence of tangled and ambiguous ownership relations (hence the label appended to the reform: clarifying property rights). Arguably, though, tangled property rights were as much a symptom as a cause of owners' insecurity, which derived ultimately from unaccountable state power. Since this was broached quite openly in the Chinese press, it is hard to believe that Shanxi officials and academics were simply not aware of it. So why did they not seek to address it? The most likely explanation, it seems to me, is that addressing it would have required fundamental changes in Chinese state-society relations and ultimately the distribution of political power.

thesis. Like the later move to nationalization, this experiment with property rights reform seems to have been actively promoted and designed by provincial policy makers. While there evidently was some support for it at the Center – especially, it seems, in the Development Research Center of the State Council – this experiment does not appear to have been an order from the Center. Moreover, the key provincial policy maker in question, Zhang Baoshun, remained the highest ranking official in Shanxi through to 2011, i.e., through the period of renationalization (2008–2010).

This strongly suggests that nationalization was never a foregone conclusion. As we saw in Chapter 2, influential individuals and bureaucracies at the Center wanted to see the state share of the coal industry increased substantially and the private sector squeezed out as much as possible, though even at the Center this was never a universally-shared position and other groups favored continued private participation in the industry. As we have seen in Section 4.7 above, all case-study provinces except Inner Mongolia sought to develop and strengthen the large state coal companies they owned, encouraged these to acquire the private mines, and at least espoused a vision in which these firms would gradually come to dominate the provincial coal industry. Yet Shanxi's initial response to rising pressure over accidents and disorderly private mining was *not* to try to eliminate the privates as a sector – whether through obligatory nationalization, obligatory closure, or some other means – but to try to improve the institutional environment in which the privates operated and thus the incentives they faced, through a mix of clamping down on dangerous and illegal behavior, and – trying to – provide more secure property rights. Politically and economically, this approach had obvious advantages over nationalization: it preserved local rent and fiscal flows, and avoided major economic disruptions and social conflicts.

4.9 “Local Consolidation”, 2004/2005 to 2008

Between 2004/2005 and 2008, all the case-study provinces began enforcing some measure of obligatory consolidation in their coal industries. The available numbers for mines are probably not very reliable, but they should capture the basic trend, and this shows clear falls in the number of mines in the different provinces in the years 2005 to 2008 (cf. Table 4.3 below and Figure 4.9 in Part I, Section 4.3). In Shanxi reported mine numbers fell from almost 5000 in 2005 to just under 2600 in 2008; in Shaanxi from 834 to 454, in Henan from just under 1700 to 556, in Inner Mongolia from about 900 to 525, and in Guizhou from 2150 to 1738. (These numbers underestimate the change in Guizhou, as the province closed down thousands of micro-scale artisanal mines that had never appeared in the coal statistics [Interview 56⁷⁷]). In other words, in all provinces the number of mines seems to have been cut by between about a half and two-thirds. These falls in the total number of mines were achieved almost entirely through reductions in

⁷⁷Senior Engineer at a Guizhou coal research institute

the number of private (township and village) mines. Total TVM *output*, though, remained constant or even grew during these years in all case-study provinces.⁷⁸ Together with the qualitative evidence presented in this section, this suggests that most of the reduction in mine numbers was achieved via consolidation rather than closure alone.

As we will see below, implementation probably saw much manipulation and distortion (e.g. companies formally merging and consolidating their operations in a single mine, but really remaining separate entities – with most of their original mines left in operation and *not* closed). The numbers very probably do accurately capture a basic trend (significant falls in mine numbers) but whether e.g. Henan really reduced the number of operating mines by two-thirds and not just by, say, 20-40% must remain open.

	Shanxi	Henan	Guizhou	Shaanxi	IMAR
2005	4924	1686*	2149	834	1378
2008	2598	556	1738	454	535

Table 4.3: Mine Numbers in the Case-Study Provinces in 2005 and 2008
 *Number is from 2004
 Sources: See Figure 4.9

Section 4.9.1 describes the consolidation process and argues that consolidation is best understood as a compromise solution between central demands for closing down much of the small-scale private coal industry, and local and provincial reluctance to do so. Section 4.9.2 turns to the role the large SOEs played in this round of consolidation. Although both central and provincial policy makers were keen to see the SOEs acquire small mines, in practice this did not happen on any significant scale in these years.

4.9.1 Consolidation as an Alternative to Closure

Like many other policy measures, consolidation as a solution to the problem of unsafe and “chaotic” mining seems to have first been proposed in Shanxi and Henan, in 2004. As noted above, in summer 2005, the Center then began orchestrating a nation-wide campaign to close or consolidate the small mines (cf. State Council 2005d, SCWSC 2006a). Through negotiations with central-government bureaucracies (chiefly, it appears, the NDRC and the Work Safety Agency) each province agreed a target number by which, by 2008, the total count of mines active in the province was to be reduced.

⁷⁸Henan is a partial exception to this: TVM output began declining slightly already in 2008.

The provinces then set targets for each municipality, which then instructed their counties to produce plans (方案) listing the mines to be closed or consolidated within their borders. The plans had to be approved by the provincial government. In each province, both at the provincial and the local level, the work was overseen and coordinated by a Leading Small Group (领导小组) comprising a deputy governor (at the local level: the mayor or county head), and the heads of the relevant provincial (municipal, county) bureaus (industry, mining, land and resources, work safety, etc.).

Several aspects of this deserve comment. Firstly, central and even provincial control over what really happened on the ground was limited and seems to have been largely confined to monitoring that the *reported* numbers for mine reductions matched the agreed targets, as well as dispatching investigation teams to carry out spot-checks in the localities in order to both learn what was in fact being done and disincentivize local officials from engaging in blatant policy violations. That the numerical targets were met, at least nominally, does seem to have been monitored quite aggressively, and there appears to have been little scope for *openly* deviating from targets, e.g. by submitting plans that failed to reduce local mine numbers by the stipulated amount. In Shanxi, provincial authorities rejected Linfen City's draft consolidation plan because it would have preserved too many mines (*Southern Weekend* 2006b). In Guizhou an official from the provincial coal bureau described the provincial – and thus the municipal – targets as “very tense” (很紧张), noting that it was impermissible for localities to deviate from the agreed numbers for mine reductions (*CYD* 2008b). However, the Center in particular does not seem to have exercised much control beyond this.

What happened in essence in these years was that the Center strongly reaffirmed its concern that the various ills bedeviling the coal industry – accidents, pollution, low recovery rates – be brought under control, and stipulated that it wanted the number of small-scale, private mines – which were at the heart of these problems – to be greatly reduced. *How* exactly this was to be achieved, however, was largely left up to the provinces. According to interviewees familiar with policy making in China, this is fairly typical: central authorities mostly confine themselves to setting broad strategic objectives and are reluctant to give provinces detailed orders about how they should go about achieving these. (Interviews 12, 40, 48, 55, 61)⁷⁹. This is all the more so if the policy problem in question is, like coal mining accidents, rather unique and locals can be expected to have greater knowledge and understanding of the issues than central officials (Interview 61). This reluctance to give detailed orders to provinces is probably also an effect of the formal hierarchies. As a junior researcher from the NDRC Energy Research Institute noted, central ministries and commissions – including the NDRC – hold the same rank as provinces, meaning they are not generally able to give binding orders to a province. Conversely, while the State Council and the Politburo can in

⁷⁹Senior (12) and junior (40) researcher from the NDRC Energy Research Institute; senior (副厅级) manager from a major SOE (48); NDRC official (55); senior official (副部级) from the tax bureaucracy (61).

principle give orders to provinces, political considerations are likely to dissuade them, since provincial governors and party secretaries are themselves members of the political elite (Interview 40).

In this context, consolidation – whereby companies that mined the same coal fields would merge or acquire each other, close their surplus mines (shafts) and retain only a single, now enlarged, mine to exploit each coal field – seems to have emerged as a politically and practically more feasible alternative to closing mines outright. Especially if it was combined with setting and enforcing minimum-size (minimum production capacity) requirements for mines (thus forcing the smallest shafts to close), it would still achieve the core central-government policy aims of reducing the total number of mines – thereby making the industry easier to regulate and control – and concentrating coal production in larger, more mechanized and capital-intensive and thus safer mines, with higher coal-recovery rates. Provided that the mergers mainly took place among the private mines, consolidation would furthermore preserve rent flows and local employment, something outright closures, too, could not.

That consolidation as a policy measure was indeed brought into play as an alternative to closure emerges fairly clearly from the documentary evidence. Thus Shanxi, in the first provincial policy document mentioning consolidation that I am aware of, stipulated in 2004 that small mines whose licenses were complete but which would have to close on account of their small scale could instead also merge, to thereby achieve the stipulated minimum scale (Shanxi Coal Industry Bureau 2004). In Guizhou in 2005 the province told the localities that, as per central-government orders, at least 300 mines had to be closed, but went on to permit them to merge these mines with others, provided they had been closed first (Guizhou Party Committee and Government 2005). More generally, from the mid-2000s onwards, provincial policy documents regularly discuss consolidation (资源整合) as the main method for solving the problem of accidents, pollution, low coal recovery rates and “irrational industry structure” (结构不合理, meaning fragmented small-scale production and backward technology) in the coal industry – the very problems that one had previously sought to address through closure (see e.g. Shaanxi 2005a, 2005b; SAWS 2006b). Provincial officials admitted fairly openly that they preferred mergers to closures because this was less contentious and had fewer social and economic repercussions. Thus an official from the Guizhou coal bureau explained to journalists that the province preferred to merge mines rather than force them to close because although “forcing [the mines] to close is very easy, this would lead to sharp contradictions. We are not willing to countenance that” (要强制关闭很简单, 但矛盾会进一步激化。这是我们不愿看到的结果) (CYD 2008b).

Especially officials from the Work-Safety bureaucracy seem to have been less than fully pleased with this substitution of mergers for mine closures. In 2006 the head of the Work Safety Agency, Li Yizhong, chided local governments for “using consolidation to protect mines that ought to be closed” (以资源整合为名, 把本应关闭的煤矿保留了下来) (PD 2006b). Inspection teams from the central and provincial Work-Safety

authorities found such substitution to be widespread (*PD* 2005b, 2007b; Guizhou Work Safety Bureau 2007). Investigations by the State Council Work Safety Commission in Shaanxi found that of 80 mines scheduled for “closure consolidation” (整合关闭) (sic) in 2006, only 11 had in fact been closed. The rest were to undergo some form of merger. Even the mines that had been closed, the inspectors criticized, “are rarely truly and comprehensively closed” (真正彻底关闭的是少部分). Regulations stipulated that the power supply of closed mines was to be cut, the shafts filled, sealed and bulldozed, and the original landforms restored, but this was rarely done. It was therefore easy to reopen “closed” mines (SCWSC 2006b). Yet even these remonstrations from central inspectors made little difference to practice on the ground in Shaanxi: Of the 216 mines that Shaanxi listed for closure or consolidation in 2007, only 16 were ordered to close, with the rest permitted to merge or even just undergo expansion and upgrading (cf. Shaanxi 2007b, 2007c). Similarly in Henan, of the 1569 “small mines” only 111 (7%) were closed: the rest underwent consolidation (SAWS 2006b).

Substituting closures with mergers hardly exhausted the range of protective actions local governments took. The consequence of hard nominal targets for reductions in total mine numbers combined with relatively weak monitoring of how targets were achieved and often strong incentives for county and municipal officials to keep as many mines as possible in business, meant that what state documents delicately referred to as “non-standard” (不规范) practices were probably widespread. For example, an investigation team from SAWS noted that in order to hit targets, local governments in Henan and Shanxi sometimes orchestrated technically or geologically irrational mergers, for instance between firms that mined different coal fields (SAWS 2006b). In one county in Guizhou operators were obliged to purchase and “consolidate” largely-exhausted shafts (*CYD* 2008b) and in Shanxi a case was discovered where a company had “merged” several shafts of the same mine (*PD* 2005b). In Shaanxi, Henan and Guizhou it was not unknown for companies to formally merge (in order to hit targets) while in fact maintaining independent financial, management, marketing, and production (mining) systems (*Caijing* 2010d, Interviews 57, 58, 70)⁸⁰. While provinces formally forbade companies to mine while undergoing consolidation – mines slated for consolidation were supposed to close and have their licenses cancelled, with production only to resume once the firm and the mine to emerge from the consolidation received its new licenses – one former Inner Mongolian mine owner claimed that the local governments in IMAR had, in his experienced, been very flexible about this: companies could, in practice, simultaneous mine and consolidate (Interview 62). Provincial governments, too, showed flexibility. In particular, they varied the minimum-size requirements for mines in light of local conditions. In Shanxi, for example, the minimum size that mines had to meet to avoid closure or consolidation was set to 90,000 tons in the major coal-producing counties, but only to 30,000 tons elsewhere. There was similar flexibility in Guizhou.

⁸⁰Guizhou businessman and former Guizhou coal bureau official (57, joint interview), Guizhou journalist (58), Shaanxi correspondent of a national paper (70)

Despite these flexibilities – and the prevalence of private-private mergers and acquisitions, see below – it appears that consolidation was often ridden with conflicts. According to a coal-mine owner from north Shaanxi, “most [owners] did not like [consolidation] and had to be motivated by the government” (Interview 77). In Guizhou, the chief engineer from a county-level coal bureau admitted that the local government often had to strong-arm mine owners into agreeing to mergers (Interview 60). In other areas of Guizhou consolidation also proved highly contentious (*CYD* 2008b). The chief engineer from the coal bureau of a county in Ordos in Inner Mongolia, too, told journalists that consolidation had been contentious and the government had to put great pressure on the local bosses to get them to undertake the mergers (*21 CBH* 2010c). Media reports even claimed that grassroots officials in Ordos asked for body guards during the mid-2000s consolidation (*EO* 2011f), though this may be an exaggeration: the two former coal-mine owners from IMAR whom I interviewed both claimed that consolidation in IMAR had, in their experience, been relatively free of conflict, because levels of trust between local entrepreneurs were high. They too however described consolidation as originating from government orders, backed up by the threat of closing or obstructing resistant mine owners (Interviews 62, 81). In Guizhou, however, the consolidation campaign does seem to have led to the murder of a county head and the abduction of a county party secretary (*Chinese Business News* 2006, *Southern Metropolis Daily* 2006, *Southern Weekend* 2007b).

Guizhou’s mid-2000s consolidation involved the closure of several thousand artisanal mines (Interview 56⁸¹), and this may have made it particularly contentious. These micro-scale mines produced only a few hundred to a few thousand tons a year. They were operated by peasants, sometimes on a part-time basis, and had played a major role in poverty alleviation in Guizhou, but they were also by far the most dangerous mines (Donaldson 2011). Given their role in helping local peasants earn a basic living, intense opposition from the local population to their closure should not be surprising.

However, it is likely that elsewhere, too, obligatory consolidation often led to intense conflicts. The parties to a merger or acquisition must reach agreement about the current and future value of the production facilities and concessions in question, and/or design trusted structures to share future revenues, profits and investment. This is never easy, but the relative absence of trusted intermediary institutions in China⁸² and the fact that owners were essentially forced into consolidation under threat of closure is likely to have made this particularly difficult and contentious, and probably frequently resulted in owners being forced into mergers with firms and individuals they would never otherwise have merged with. Connected bosses could also potentially exploit

⁸¹Senior engineer from a Guizhou coal-mining research institution

⁸²The value of mines slated for consolidation was generally meant to be assessed by third-party auditors. However, owners apparently often did not consider these to be particularly trustworthy (cf. *CYD* 2008b).

local and provincial authorities' veto power over consolidations to force others to let themselves be consolidated by them on their terms.⁸³

4.9.2 SOE Takeovers and Rent Preservation

As we saw in Section 4.7, provincial authorities in Shanxi, Henan, Guizhou and Shaanxi – as well as central officials – all expressed the hope that large provincial-owned SOEs would come to dominate their coal industries. They also all urged their SOEs to use the consolidation campaign as an opportunity to acquire mines. Yet little of this actually happened.

Henan seems to have gone furthest with actually implementing SOE acquisitions. According to a report from the State Agency for Work Safety, in 2004, the provincial leading small group for coal-mine consolidation had made increasing the share of coal resources controlled by the “provincial backbone coal enterprises” (省煤炭骨干企业, meaning the large provincial SOEs) an aim of consolidation, and by end-2005 some 161 small mines had duly been acquired by SOEs. But that amounted to only 10% of the 1569 mines scheduled for closure or consolidation. Among the remainder, 1297 (83% of the total) were merged among each other, meaning that they remained largely or wholly privately owned (the other 7% were closed) (SAWS 2006b).

The limited scale of the acquisitions undertaken by the Henanese SOEs in these years is underscored by a report from the Zhengzhou Coal Industry Group (郑州煤炭工业集团), one of Henan's five (then still seven) provincial state mining groups. In 2005 Zhengzhou Coal acquired 45 small mines within its periphery (周边) – but complained that in mid-2007 there *still* were independent small mines active within the area of its own large shafts (Zhengzhou 2007; cf. NDRC 2008). This is remarkable, because while there is some evidence that the SOEs were not particularly enthusiastic about acquiring small mines in general (see below), they did greatly object to the continued existence of small mines within the areas of their shafts because, as Zhengzhou Coal complained, this created serious safety risks for their own workers, and destroyed their coal reserves. In other words, if there were any small mines that Zhengzhou Coal should have been eager to acquire or get closed down, it should have been these, yet it was not, apparently, able to do so for all of them.

In the other provinces, even less by way of SOE acquisitions seems to have happened. The just-cited SAWS investigation report describes the consolidations in both Henan and Shanxi in some detail, but unlike in Henan, in Shanxi no SOE acquisitions are mentioned. Both an official from a municipal coal bureau (Interview 39) and managers from two Shanxi SOEs (Interviews 38, 86) told me that prior to 2009, there had been only very few acquisitions of private mines by SOEs in Shanxi. This is also consistent

⁸³The municipal coal bureau official from Shanxi recounted such a case to me, but also claimed that such cases had probably been rare (Interview 39).

with the general silence in the media, prior to 2009, about SOEs acquiring private mines. Had large-scale acquisitions of private mines by SOEs taken place in the years 2005–2008, this would almost certainly have been reported on extensively, as indeed it was when such acquisitions did happen in 2009 and 2010.⁸⁴ Instead, according to the coal-bureau official, the consolidations in Shanxi in these years mainly involved private mines merging among each other (Interview 39). This is also the picture that emerges from media reports on industry developments in Shanxi at the time, which tend to describe or imply that consolidations took place mainly or wholly among the privates.

The same was the case in Shaanxi, Guizhou and Inner Mongolia: again, interviewees consistently described the consolidations that took place in all of these provinces between 2005 and 2012 as mainly involving local privates acquiring each other (Interviews 56, 57, 58, 59, 60, 62, 63, 67, 70, 71, 72; 74, 75; 77; 79, 81⁸⁵). This is not to claim that there were *no* acquisitions of private mines by SOEs. For example, in 2005 Yanzhou Coal, a large coal SOE from Shandong bought a private mine in Guizhou (*PD* 2005c) and later in the 2000s, several SOEs from other provinces acquired local private mines in Zunyi City in Guizhou (Interview; cf. NDRC 2008). Shenhua apparently bought 10 local mines in Yulin in the early or mid-2000s (Yulin 2007). As we will see in the next Chapter, in IMAR in 2010 to 2012, a certain number of private owners sold to CSEOs, as the latter's deep financial pockets meant that they could offer better prices than even the biggest local privates. Although I know of no case of Shanxi SOEs acquiring private mines prior to 2009, it would be surprising if there were *no* such cases *at all*. The larger point, however, is that in all the case-study provinces the large majority of coal-mine mergers and acquisitions prior to 2009 seem to have involved either privates acquiring privates, or SOEs merging with SOEs.

Why were there not more takeovers of privates by SOEs in these years? The SOE managers and the municipal coal-bureau official I interviewed in Shanxi told me that the main reasons were firstly cost – the prices that the privates demanded were mostly beyond what the provincial SOEs could easily pay – and secondly the small scale and poor equipment of the mines in question, which would have made substantial investments necessary in order to bring them up to state-mine safety standards (Interviews

⁸⁴That the absence of media reports about (hypothetical) SOE acquisitions reflects the absence of such acquisitions at the time rather than some other factor is also supported by the extensive coverage that the obligatory nationalization of Shaanxi's private oil industry in 2003/2004 generated. For more on that case, see *The Economist* (2003, 2012).

⁸⁵Senior engineer from a Guizhou coal-mining research institution (56); Guizhou businessman and former Guizhou coal bureau official (57, joint interview), Guizhou journalist (58); economists from a major Guizhou university who work on mining-related issues and in one case had held shares in a local mine (59, joint interview); chief engineer and junior staffer from a county-level coal bureau in Guizhou (60, joint interview); former provincial-level official from Inner Mongolia and Ordos real-estate developer (67, joint interview); chief engineer at a Shaanxi coal-design institute (71); economists from Xi'an who consult for local or provincial governments (63, 72, 75); journalists from Shaanxi who mainly cover energy topics (74, 79); Shaanxi correspondent of a major national newspaper (70); Shaanxi coal-mine owners (77); former coalmine owners A and B from Inner Mongolia (62, 81)

38, 39, 86). According to the personal assistant of the head of one major Shanxi SOE, acquiring yet-unmined coal fields in Inner Mongolia or Xinjiang and then building large opencast mines from scratch was much more attractive than acquiring the small mines and partially-tapped fields available in Shanxi (Interview 87). These concerns on the part of SOEs about acquiring the private mines were also expressed in press reports about the nationalizations in Shanxi and Henan in 2009 and 2010 (*21 CBH* 2010b, *Caijing Online* 2009, *Southern People Weekly* 2009, *EO* 2011e). Several other interviewees also claimed that for the stated reasons, the large SOEs were not enthusiastic about the nationalizations (Interviews 10, 12, 56, 58, 59).⁸⁶

These claims must be treated with caution. When Shanxi and Henan enforced nationalization in 2009/2010, this triggered heated polemics in the media and online. In this context, emphasizing that the SOEs themselves were unenthusiastic about the acquisitions and were making them only as part of state efforts to raise safety (and not to enrich themselves) had obvious political attractions. However, while some of the experts quoted in the press as well as the just-cited academic (Interview 10) may well have been primarily concerned to give answers that were politically on-message rather than entirely factually correct, there is other evidence in support of this position – that the SOEs mostly really were less than wholly enthusiastic about acquiring small private mines – that is more reliable. Among my interviewees, the senior NDRC researcher (Interview 12), the personal assistant (87), the two Shanxi SOE managers (38, 86), the Shanxi municipal coal-bureau official (39), and the Guizhou engineer, academics and journalist (56, 58, 59) were either speaking in very private and thus “secret” environments or made other statements that were distinctly critical or damaging to the state’s larger claims to be providing good and just governance, that they would have been unlikely to make had they been primarily concerned to avoid making politically off-message remarks.

The basic accuracy of these statements is also supported by a 2008 NDRC research report, which also found that the high costs involved in acquiring and upgrading small mines and the higher risk of accidents occurring in them (which threatened the SOEs’ safety-performance statistics), “[negatively] affected the large coal companies’ enthusiasm for acquiring [small mines].” (兼并小煤矿成本高、风险大，影响大型煤炭企业兼并重组的积极性). When such acquisitions had been made, the NDRC researchers wrote, they had not proven easy, citing Zhengzhou Coal’s 2005 acquisition of the 45 small mines as an example: “[the small mines’] production capacity was scattered, their mining equipment backward, structural contradictions prominent (结构性矛盾突出), there was insufficient capacity for development (发展后劲不足), and some of the mines had low quality personnel and poor management systems and practices.” (人员素质较低，经营不善). Grafting Zhengzhou Coal’s “advanced management concepts and

⁸⁶Chinese economist who studies the coal industry (10), senior researcher from the NDRC Energy Research Institute (12), senior engineer from a Guizhou coal-mining research institution (56); Guizhou journalist (58); economists from a major Guizhou university (59, joint interview)

culture” onto them would be a “relatively long process”. Meanwhile, the acquisitions stretched Zhengzhou Coal’s own organizational and management capabilities (NDRC 2008).

The report made several recommendations to facilitate acquisitions: SOEs that acquired small mines were to be offered subsidies, tax breaks and expedited project approvals, and be given a three-year grace period before the acquired mines had to meet SOE safety standards and performance targets. Furthermore, governments were to intervene in the consolidation process “to ensure that the large enterprises can acquire the small and medium-sized mines at rational prices, and prevent the private mines from demanding exorbitant prices when they are acquired” (政府在兼并重组过程中要加大协调力度，保障大型煤炭企业以合理价格收购中小型煤矿，防止在对民营煤矿进行收购时，出现漫天要价的现象) (NDRC 2008).

In 2009 and 2010 Henan and Shanxi indeed structured the consolidation process in such a way as to ensure that the state firms only had to pay what one SOE manager called “fair” prices (公平) (and which the privates denounced as robbery): They prohibited most mines from selling to any acquirers other than the provincial SOEs, divided the coal regions into several districts within which different SOEs seem to have had first choice of mines (thus creating local monopsonies), and gave each provincial SOE a target number of small mines that it had to acquire (see next chapter). In other words, they forced the privates to sell to the SOEs, and forced the SOEs to buy them. But in the years from 2005 to 2008, none of the case-study provinces seem to have enforced anything of this kind, with the possible – and in any case at most only very partial – exception of Henan.⁸⁷ The question is, why?

No definite answer can be given. But the most likely explanation is that this was the course of least resistance, requiring the least expenditure of political capital. When it did occur, nationalization was far from popular among Shanxi and Henanese local governments. Without aggressive state intervention to cap mine prices, nationalization would have been financially ruinous. One economist estimated that the private mines in the province were worth some RMB 300 billion (*21 CBH* 2009). But uncompensated nationalization could be expected to prompt a public outcry and damage the local economy (as it would in 2009/2010). Conversely, permitting “local consolidation” (privates acquiring each other while enforcing some basic standards for safety and mine size) could materially improve the safety situation – as indeed it did, cf. Table 4.4 – and minimally satisfy central-government demands for reducing mine numbers and increasing mine size, while doing relatively little damage to local economies and leaving local rent flows intact. Until this moderate, politically cheaper approach had failed, why opt for radical approaches?

⁸⁷I have been unable to discover the precise circumstances of the acquisition of the 161 small mines by Henan’s provincial SOEs in 2005. In any case, as noted above, these only amounted to 10% of the total population of small (private) mines slated for consolidation that year. In other words, even in Henan at that point 90% of small mines were not acquired by SOEs.

CHAPTER 4. COAL-INDUSTRY CHANGE IN FIVE PROVINCES, C. 1995 - 2007.
POLITICAL ECONOMY AND POLICY

	Shanxi		Henan		Guizhou		Shaanxi		IMAR	
	Total Deaths	per Mio. Tons								
2004	485	0.98	380	2.5	894	9.2	299	2.3	99	0.5
2008	275	0.42	256	1.3	453	3.8	113	0.5	25	0.07

Table 4.4: Improving Safety Indicators in the Case-Study Provinces: Coal Mining Deaths and Death Ratios

Source: CCIYB 2005, 2008 and calculations based thereupon.

The overall argument of this section has been that the consolidation measures provincial governments took in the mid-2000s were, at least implicitly, designed so as to permit much of the local private mining sectors to remain in existence, in order to protect local economic, fiscal and rent-seeking interests, including a certain amount of implicit tolerance for very “flexible” practices. Is there evidence for significant provincial variation on this dimension (i.e., for some provinces being more stringent about enforcing genuine consolidation, and others more tolerant of “flexible” practices)? If so, how does any such variation fit with the arguments of this section, and of the thesis generally?

In fact, there is very *little* evidence for regional variation either way: I simply do not know whether some regions or provinces were more stringent and others more flexible. However, there are a few hints in the sources: Guizhou does seem to have been quite aggressive about eliminating the micro-scale artisanal mines. The engineer from the Guizhou coal research institute said that while generally coal-mine consolidation had been approached with considerable flexibility in Guizhou, the artisanal sector really had been largely eliminated (Interview 56). Occasional press reports also support this (e.g. *Southern Metropolis Daily* 2006), as does the dramatic improvement in mining safety (cf. Table 4.4). Conversely, the Shaanxi coal-mine owner I could interview claimed that in the mid-2000s Shaanxi had not had been very aggressive about enforcing consolidation (Interview 77). There is also evidence that in the late 2000s and early 2010s Shaanxi permitted companies to expand and upgrade their mines, instead of

enforcing mergers (cf. next Chapter). Finally, there are indications from interviews and media reports that officials in Inner Mongolia were in some respects quite tolerant of “flexible” practices – specifically, of mines continuing to produce while undergoing mergers or upgrading – and quite aggressive about enforcing that real consolidation ultimately did take place (even if one produced while doing it) (*Chinese Business News* 2011, Interviews with former coal mine owners A and B from Inner Mongolia).

It must be emphasized that these indications of variation are really no more than hints, not firm evidence. But they are nevertheless worth reflecting on as a means to test the general claims of this thesis – that accidents and media coverage accidents played a central role in driving coal-industry restructuring, and that this restructuring was heavily shaped by efforts to preserve rents flowing from the private sector. Assuming for the sake of argument that the variation hinted at was indeed the case, where does that leave the general argument? In fact, the (hypothetical) variation fits it quite well.

In Guizhou, the micro-scale artisanal mines seem to have made little contribution to local GDP growth, taxes and rent flows, precisely because they were so small. They were however an important cause of Guizhou’s particularly severe accident problem, and they also damaged local coal resources. Concentrating mining in enterprise-scale TVMs would have been better both for work safety, and for increasing local growth, taxes, and rents. In other words, from local governments’ perspective, closing the artisanal mines – not the proper enterprise-scale TVMS – was quite compatible with preserving rents; indeed, by preserving coal resources for the TVMs, it might even have increased them.

As discussed in Chapter 3, for geological reasons accidents and media coverage were a relatively less severe problem for Shaanxi and Inner Mongolia than for Shanxi and Henan: they had fewer accidents and deaths overall, and few very large accidents in particular. Thus, we should not be surprised if they were particularly tolerant of “flexible”, rent-preserving practices such as permitting simultaneous mining and upgrading or consolidation. That Inner Mongolia should have, apparently, been particularly energetic about enforcing that real consolidation ultimately did take place does not logically follow from my general argument, but it does not contradict it, either. Recall that by 2005 IMAR had no SOEs of its own. The consolidations apparently so energetically effected were between *private local* firms, and served to build up very large and competitive *local private* firms – the very firms that paid taxes locally, generated local employment, and were most amenable to rent-extraction from local officials. Aggressively strengthening these firms made complete sense from the perspective of rent preservation. If this characterization of consolidation in Inner Mongolia really is accurate, then real questions remain about why local officials in IMAR showed such initiative (building up local firms as local and provincial champions) while elsewhere local officials apparently did not. Trying to answer these questions is beyond the scope of this thesis.⁸⁸ The point here is more simple: variation of this kind does not contradict my general argument.

⁸⁸The most plausible explanations are, I believe, some combination of *leadership, regulatory benefits due to minority-area status, and geology and historical industry development*. Chinese discussions of the

4.10 Conclusion

This chapter has sought to make two main points. Firstly, that the private mines afforded local officials much greater opportunities for rent extraction than the SOEs did, as well as other governance benefits, and that they therefore opposed nationalization. As we will see in the next chapter, when Shanxi and Henan mooted nationalization in 2008 and 2010, they indeed ran into concerted resistance from local officials. Secondly, this chapter analyzed the policies adopted in the case-study provinces towards the industry in the early and mid-2000s. The point this analysis has sought to make is that up to the end of 2007, none of the case-study provinces had made any serious moves towards eliminating the private sector, whether through closure or nationalization. Even though all case-study provinces (except the special case of Inner Mongolia) sought to develop and strengthen the large state coal companies they owned, their actual policies vis-à-vis the private sector sought to preserve and in some cases even strengthen it. Thus they responded to the Center's 2005 push for reducing the number of small-scale TVMs with what I have termed "local consolidation", merging the privates among each other – not with closing or nationalizing them. Shanxi in particular pioneered an innovative program of institutional reform ("property rights clarification") – subsequently adopted in the other provinces, too – that was supposed to improve the institutional environment in which the privates operated and thus the incentives they faced, by clamping down on dangerous and illegal behavior and providing more secure property rights. Politically and economically, this approach had obvious advantages over nationalization or closure: it preserved local rent and fiscal flows, and avoided major economic disruptions and social conflicts. The larger point is that this behavior on the part of the provinces indicates that nationalization was never a foregone conclusion. After 2007, however, Shanxi and Henan did nationalize, while the others provinces did not and instead continued the policies of the pre-2008 period. The next chapter examines how and why this was so.

question of why Inner Mongolia, and Ordos in particular, developed so many very large and competitive local private firms tend to focus on cultural and leadership attributes. Thus it is often claimed that local and provincial leaders in Inner Mongolia were particularly "open" (开放) and "liberated in their thinking", characteristics attributed to the – supposedly – open-minded, entrepreneurial Steppe culture that developed outside the confines of the Great Wall (关外), in contrast to the – supposedly – bureaucratic and hide-bound culture characteristic of officialdom on the Chinese side of the Wall (关内). This approach is unlikely to yield many insights. More promising is focusing on the degree to which minority-area status may have permitted significant policy flexibility unavailable elsewhere (especially as regards tolerance of informal finance, and early SOE reform), and geology and historical development: Very large untapped coalfields that had not yet allocated to others existed in Inner Mongolia, fields which moreover suited the development of very large open-cast mines and thus large mining companies. This may well have made developing large local mining firms feasible in a way that it was not in provinces like Shanxi where many fields had already been extensively mined, the impossibility of open-cast mining dramatically pushed up capital costs, and there were fewer unclaimed coalfields.

Chapter 5

Changing Provincial Coal-Industry Policies after 2007

5.1 Summary and Chapter Outline

This chapter traces how coal-industry policies evolved in the case-study provinces after 2007. Sections 5.2, 5.3 and 5.4 show how, in response to the continued occurrence of large accidents that were intensively covered in the media, Shanxi began to adopt and implement a radical rent-destroying policy of nationalizing or closing most private coal mines. Sections 5.5 and 5.6 turn to Henan, Shaanxi, Inner Mongolia and Guizhou. In Henan (Section 5.5) we see a very similar process as in Shanxi, with large accidents again prompting nationalization. Conversely, in the other case-study provinces (Section 5.6) there was no forced nationalization. While renewed pressure from the Center for industry restructuring did lead to new rounds of coal-mine consolidation also in these provinces after 2008, the policies they adopted essentially constituted a continuation of the rent-preserving “local consolidation” discussed in the previous chapter. Rather than enforce nationalization, Shaanxi, Guizhou and Inner Mongolia sought to preserve the (rent-creating) private coal sector. Superficially ambitious targets for industry consolidation were set, but these were complemented with regulatory loopholes and sometimes simply lax enforcement in order to enable the small-scale private mines to merge among each other (instead of forcing buy-outs by large state concerns, as in Shanxi and Henan). Thus, large privately-owned coal industries remained in place in these provinces – at least initially. This very different policy choice by Shaanxi, Guizhou and Inner Mongolia is explained with the absence of large, intensively-covered accidents in these provinces.

Beginning in 2012 and gathering speed in 2013, the coal market in China entered a downward spiral, from which it has yet to recover. As of December 2015, prices have fallen by 55% or more. The precise ramifications of the market’s collapse vary by region and clear data have yet to emerge. However, there is evidence that in Shaanxi and Inner Mongolia at least, the price declines have hit private firms particularly badly, due to these areas’ remoteness from the main sites of coal consumption and their private producers’ dependence on trucking to carry coal to market. Thus it is likely that in the coming years in these regions too the industry share of the large state corporations will grow significantly.

5.2 Accidents, Media Coverage and Nationalization in Shanxi: The Impact of “Sudden Incidents”

The adoption and implementation of nationalization in Shanxi occurred not as a single decision, but as a somewhat torturous and halting process that ran from December 2007, when Shanxi first began to seriously explore nationalization as a policy option, to spring 2009, when the final decision to press ahead was taken (Actual implementation dragged on into 2011.) This process was marked by resistance from local governments

and mine owners, and public outcries over nationalization and “reform reversal”. Yet large mining accidents continued to occur, and that drove the process forward – despite the resistance – not least by prompting repeated central intervention.

The section presents three main findings. First, large, intensively covered accidents were the main causal force prompting nationalization and driving this policy forward even in the face of resistance. Second, although several individual municipal leaders seem to have played an important role in the adoption of nationalization first as a local and then subsequently as a provincial policy, resistance from local governments, “coal bosses”, and parts of the media and the liberal intelligentsia was substantial. There are indications that Shanxi at several points hesitated to continue with nationalization, on account of the intensity of the opposition to it. Third, individual municipal leaders, the provincial government, and central leaders were all involved in the nationalization process. While the lack of data makes it hard to be certain about the details of the respective roles of these different actors and about where precisely decisions originated, it appears that the key decisions were taken at the provincial level, though central support for these decisions played a decisive role in enabling provincial leaders to override the intense resistance to nationalization that they faced. Moreover, while provincial decisions were crucial for rolling out the nationalization policy province-wide, there are indications that the personal initiative of at least one municipal leader – the party secretary of Linfen – too was important, possibly even crucial, for getting nationalization *started*. Put another way, nationalization was not so much a case of the Center forcing its policy preferences down the throat of a reluctant province, as central, provincial and certain individual municipal leaders interacting to design a particular policy – and then force this down the throats of very reluctant county, township and to a lesser extent municipal governments.

5.2.1 Initial Policy Change in Linfen

5.2.1.1 Event Narrative

Figure 5.1 tracks the number of articles and multimedia products (slide-shows, videos, etc.) that mention mining accidents in Shanxi and were published each month between January 2007 and December 2009 and linked to online by the Sina.com portal¹. During these years, four especially large accidents occurred in Shanxi: on 5 December 2007, 105

¹The search strings used were “Shanxi” AND “Mining Accident” (山西AND矿难), “Shanxi” AND “Coal Mine” AND “Accident” AND NOT “Mining Accident” (山西AND 煤矿AND事故 AND NOT矿难), and “Shanxi” AND “Dam Collapse” (山西AND溃坝). To corroborate that the spikes were indeed driven by the accidents noted in the Figure and not by spurious correlations of the search terms with something else, I also conducted searches that replaced “Shanxi” in the search strings with “Linfen” (临汾) and, for the 2009 Tunlan accident, with “Tunlan” (屯兰). This produced the same spikes, of a similar size (597 hits for the December 2007 accident in Linfen, 607 hits for the September 2008 accident in Linfen, and 577 hits for the Tunlan accident in February 2009).

workers were killed at an accident in a private coal mine in Linfen's Hongdong county ("Hongdong accident"); on 13 June 2008, 34 were killed at a private coal mine in Lüliang; on 8 September 2008, the dam of a mine-tailings pond at a private iron ore mine in Linfen collapsed, inundating a village and killing 277 people ("Kuiba accident"²); and on 21 February 2009 an accident at the state-owned Tunlan coal mine killed 74 workers ("Tunlan accident"). In March and May 2007 and in January 2008 Linfen also saw three smaller accidents at private coal mines, killing 26, 28 and 20 miners, respectively.

As can easily be seen, each of these accidents led to an explosion of coverage. This was precisely the type of "sudden incident" discussed in Chapter 3 that so worried political leaders: major disasters whose shocking nature would trigger extensive media coverage and commentary and on- and offline chatter that could whip up public emotion. This was especially the case with the December 2007 Hongdong and September 2008 Kuiba accidents in Linfen, since both took place in mines whose operations were soon found to have violated numerous laws and regulations (cf. Xinhua 2007, Xinhua 2008a) – meaning that regulatory failure and, as was subsequently found, corruption of local and provincial officials played an important role in these accidents.

Events of this kind tend to prompt the Center to respond with "disciplinary storms" (问责风暴); that is, harshly punish local officials in order to incentivize better future performance and demonstrate concern and responsiveness to the public at large and "pacify popular outrage" (平息民愤) (Chapter 3). This is exactly what happened in Linfen: after the December 2007 accident, the mayor of Linfen municipality (地级市) was rapidly removed from office (免职) and subsequently also demoted (降级) (PD 2007c). In total, 39 individuals were given jail sentences, including a vice-mayor who was sentenced to 14 years. A further 39 individuals received administrative and party sanctions, including the Linfen party secretary and the Shanxi vice-governor responsible for work safety (Xinhua 2009a). The Linfen party secretary was also exchanged, though this was not registered as a formal disciplinary sanction. A new party secretary, Xia Zhengui (夏振贵), was installed within two weeks of the accident. A new mayor was soon appointed, too (*Southern Weekend* 2009). In terms of both the ranks of those affected and the severity of the punishments, these were the harshest sanctions administered to Shanxi officialdom over accidents up to that point.

The punishments that the Center administered to Shanxi officials for the September 2008 accident were even more severe. Within days, governor Meng Xuenong was forced to publicly "take responsibility and resign" (引咎辞职) (Xinhua 2008b). Linfen's party secretary and mayor – who had both been appointed only nine months before, after the December 2007 Hongdong accident – were first suspended and investigated (停职检查) and then dismissed (撤职). The vice-governor responsible for safety was removed

²From the Chinese word for dam burst; *kuiba* (溃坝).

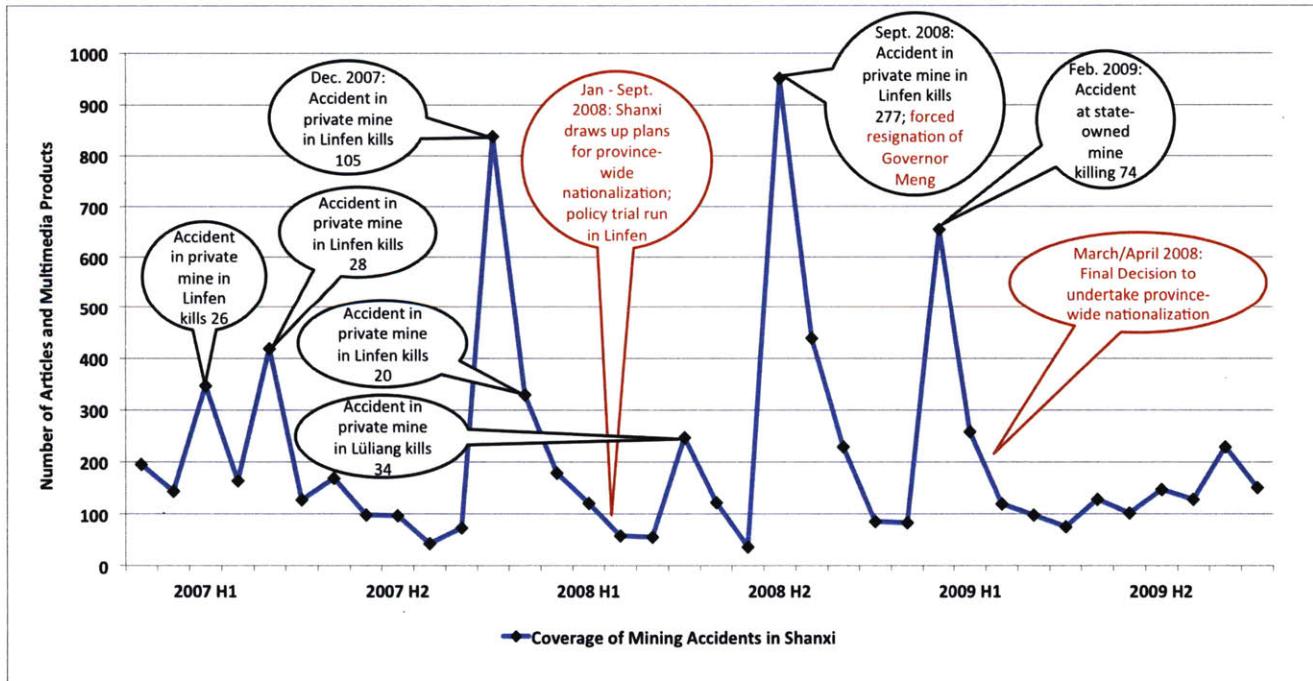


Figure 5.1: Coverage of Mining Accidents in Shanxi, 2007–2009

Source: Sina.com

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from office, too. In total, 62 individuals received party and administrative sanctions. 52 individuals were prosecuted. Numerous senior municipal and county officials received lengthy jail sentences (*Beijing Youth Daily* 2010, *Changsha Evening Post* 2009, *Legal Daily* 2009, *Southern Metro Daily* 2009b, *Xinhua* 2009a). These were some of the harshest accident-related sanctions ever administered in China. In no other case do the governor, vice-governor, or municipal party secretary seem to have lost their jobs.

The December 2007 accident in Linfen proved a watershed moment for coal policy in Shanxi. It prompted a re-evaluation of the rent-preserving policies discussed in Chapter 4; viz. “clarifying property rights” (明晰产权) and what I called “local consolidation”. These policies had sought to improve industry development – and thus work safety – by giving private owners clearer and more secure property rights and thus stronger incentives for longterm investment in mining equipment and safety technology, and by closing the smallest and least safe mines and consolidating the remaining privates among each other locally. They had attempted to solve (or at least significantly ameliorate) the safety crisis while still preserving a large private and thus *local* government-controlled coal sector. Property rights clarification, in particular, had been first pioneered in Linfen, in 2004/2005.

But from November 2006 to January 2008 the city suffered five coal-mining accidents with, respectively, 24, 26, 28, 105, and 20 fatalities. Evidently, neither “property rights clarification” nor local consolidation had stopped the occurrence of spectacular accidents. In 2007, Linfen suffered more large accidents than in any other year in the 2000s.³ Post-accident investigations moreover revealed that these policies had created breeding grounds for corruption (as bosses paid off local officials to avoid mergers or closures, or to underreport reserves and thus minimize compensation payments to the state), and not to have stopped the phenomenon of mine owners frequently re-leasing mines among each other on a short-term and speculative basis (层层转包), thereby creating the complex and intransparent ownership structures that “property rights clarification” had sought to end because they were seen as contributing to accidents. Thus, “property rights clarification” was discredited (*Oriental Outlook* 2008; *Southern Weekend* 2008b, 2008c; *Caijing* 2010a). As the *People’s Daily* (2009) noted, “the aims [of property rights clarification] had simply not been realized” ([明晰产权的]目标并未实现). Instead, policy makers now began looking to nationalization. By having large SOEs consolidate most of the private and small mines – thus reducing mine numbers and increasing the size of the mines – it was hoped that safety could be improved.

Once again, the initial policy experiments were launched in Linfen, though Datong city, too, proved an early policy adopter. In January 2008 the newly-installed party secretary

³Between 2000 and end-2007 there were nine coal-mine accidents with 20 or more fatalities in Linfen. Of these, three occurred in 2007. In no other year did more than one accident of this size happen in the city. The December 2007 accident, moreover, was the worst accident in Linfen since the early 1990s that I know of. (Source: Own compilation of data on accidents from Safehoo.com and media reports, and Shan 2004.)

of Linfen, Xia Zhengui, began informal talks with 10 major SOEs from across the nation about having them take over the local mines (*Caijing* 2010a, *China Economic Weekly* 2008a). Policy decisions were announced in March and April (Linfen 2008a, 2008b). All mines with production capacities smaller than 300,000 tons per annum – meaning, 70% of the city’s 385 private mines⁴ – as well as any larger mines that did not meet safety standards would have to let themselves be acquired by authorized firms, or close. The acquirers would then merge and upgrade the acquired mines, thus reducing the total number of mines in the municipality from 392 to 260.

The city largely restricted the right to acquire the small mines to “large-scale” state coal groups and large-scale state-owned firms in coal-related sectors like electricity generation or coking (国有大型煤炭企业集团、大型涉煤国有企业). As we will see, in practice “large-scale” meant provincially or centrally-owned. Local state-owned coal companies and large local private companies⁵ were permitted to acquire mines in the imminent vicinity of their existing mining operations (周边) in order to integrate them into these, but were forbidden from acquiring mines elsewhere in Linfen (Linfen 2008a, 2008b; cf. *China Coal Industry* 2008).

In 2009 and 2010 the obligatory nationalization of the private coal mines would unleash a storm of public criticism, prompting the Shanxi government to deny that it was undertaking nationalization at all, and to try to obfuscate the nature of the changes to industrial structure that were taking place on the ground. But when nationalization was first trialed in Linfen in 2008, the city and the state media were still very open about what was being done. The Linfen government stated that the overall objective (总体目标) of its policy was to “create a coal-mine ownership structure dominated by large-scale *state-owned* coal enterprises” (形成国有大型煤炭企业为主的煤矿产权体制) (Linfen 2008a, my emphasis). Both state and commercial media openly spoke of Linfen’s coal reforms as a case of renationalization (e.g. *Economic Information* 2008, *Southern Weekend* 2008b), and some state outlets celebrated this (e.g. *China Coal Industry* 2008).

5.2.1.2 Analysis: Accidents and Safety as Drivers of Policy

Section 5.4 marshals the evidence that Shanxi’s and Linfen’s moves to nationalization was driven by accidents and by the growing toll that “accountability” (问责) was wreaking on the careers of Shanxi officials. But two pieces of evidence should already be noted here, for they pertain specifically to Linfen’s decision. For one, there is the temporal sequence: the policy switch to nationalization occurred after Linfen and Shanxi had

⁴*Economic Information* (2008) reports that of the city’s 392 coal mines, 385 were private. *China Coal Industry* (2008) reports that 275 mines were to be acquired by other firms as part of Linfen’s nationalization drive because they failed to make this minimum-size benchmark.

⁵Defined as firms with more than 20 million tons of allotted coal reserves and production capacity above 450,000 tons per annum.

once again suffered a large, intensively-covered accident (the December 2007 accident), and after the existing policy approach to resolving the safety crisis (property-rights clarification and local consolidation) had been discredited by the continued occurrence of accidents. Nationalization was moreover introduced by a new city leader – party secretary Xia – who was posted to Linfen within two weeks of the December accident to take over from the existing city leaders, and appointed in a manner intended to signal that he had the full support of the provincial leadership to take aggressive measures (*Southern Weekend* 2009).

The second piece of evidence for the central role that mining accidents – and city leaders' concern over the career risks that accidents posed to them personally – played in the nationalization decision, lies in the criteria that the city used to define which firms would be permitted to acquire small mines, and in the emphasis that the city's policy documents placed on where responsibility for the safety of the mines would lie after their acquisition.

Recall that Linfen only permitted “large-scale” state companies to undertake unrestricted acquisitions of small mines anywhere in the municipality. Private firms and even “local” (i.e. municipally or county-owned) SOEs were only allowed to acquire mines in special circumstances. Strikingly, the city defined “large-scale” state firms not only in quantitative-economic but also in *regulatory* terms. To be considered “large-scale” (大型), an SOE had to meet certain minimum-size requirements⁶ and be under “independent work-safety assessment” (安全生产独立考核), meaning that its work-safety performance would not count towards the city's performance, and city leaders would not be assessed or responsible for it (Linfen 2008a, 2008b). This regulatory definition of what a “large-scale” SOE was, meant that generally these could only be provincially or centrally-owned firms, for only these firms have independent work-safety assessment. (The safety performance of locally-owned SOEs generally counts towards the city's overall work-safety performance, and city leaders are responsible for these firms' performance.)

The intensity of the city leaders' concern over this point is underscored by the fact that they were not satisfied with leaving this shift of responsibility for mining safety and safety regulation implicit in their peculiar regulatory definition of what a “large-scale” SOE was. Rather, the policy documents explicitly recorded that the large-scale SOEs would have full responsibility for the safety of the mines they acquired (承担安全生产全部责任) and that “the local government departments will no longer be responsible for safety supervision and safety management [of these mines]” (Linfen 2008a). In other words, should regulatory or supervisory failures be found to have contributed to any future accident, then the responsibility for this would not lie with Linfen officials, and they would not be held accountable.

⁶Quantitatively, a “large-scale” SOE had to have at least 5 million tons total production capacity and at least one individual shaft with 1.8 million tons production capacity.

These points about the site of responsibility in the event of accidents help explain why Linfen's leaders specifically wanted large SOEs to take over the running of the coal industry. These firms *did* have a substantially better safety record than either the private mines or the local state mines (cf. Figure 2.3 in Chapter 2). Of the 43 coal-mine accidents with 20 or more fatalities that occurred in Shanxi between 2000 and end-2007, only 5 occurred in mines run by the large state companies – even though these companies produced just under half of total provincial coal output.⁷ The rest occurred in private and local-state mines, with most occurring in private mines. Yet at least some of the largest private mines also had excellent safety installations and practices (Interview 21⁸). But for city leaders, provincial and central SOEs had the crucial advantage over privates of not falling under their regulatory authority, meaning that they would not be held responsible for accidents in their mines. They remained responsible for accidents in private firms, however.⁹

5.2.1.3 Analysis: Site of the Policy Decision

It is unclear with which individuals and which level of government the decision to nationalize the small mines in Linfen originated. Media articles generally portrayed the decision as issuing mainly from Xia Zhengui, the new Linfen party secretary. Xia, they point out, had served as mayor of Jincheng (晋城) prior to his elevation to the Linfen party secretaryship. While Linfen's coal industry consisted almost entirely of private firms, several large provincial and municipally-owned SOEs accounted for a substantial fraction of the industry in Jincheng and as a result, it was claimed, there had been fewer accidents. Faced with the task of solving Linfen's safety crisis, Xia thus supposedly resorted to the "Jincheng Model" that he knew and that seemed to work (e.g. *Caijing* 2010a, *Southern Weekend* 2008c).¹⁰

Yet it is hard to believe that Xia would have taken such a radical step without first assuring himself of clear support from the provincial leadership. This he got: on the occasion of his appointment, Xia was personally accompanied to Linfen by Shanxi's

⁷Source: Own compilation of data on accidents from Safehoo.com, media reports, and Shan 2004.

⁸Western mining safety consultant with long work experience in China.

⁹In 2010 Shanxi formally released local governments from all responsibility for safety at the mines of the provincial SOEs and China Coal, the main central-state firm active in Shanxi (cf. Shanxi 2010). But this was just a formal ratification of existing practices. As discussed in Chapter 4, local governments had no regulatory authority over provincial or central SOEs, wherefore it made little sense to sanction them for accidents in these firms. Indeed, to the best of my knowledge they never were: Of the seven accidents with 20 or more fatalities that occurred in mines run by provincial SOEs in Shanxi between 2000 and 2011, I was able to obtain information about sanctions administered in five: in none of these were local officials disciplined. Nor were local officials disciplined over the two accidents with over 20 casualties that occurred in provincial SOEs in Guizhou in the 2000s, or for the huge accident killing 166 in an SOE mine in Shaanxi in 2004.

¹⁰From 2000 to 2012 Jincheng indeed only suffered two accidents with 20 or more fatalities (21 and 23 deaths, respectively), which is much better than the toll in most other coal regions of Shanxi. Whether this really was due to Jincheng's ownership structures I cannot assess.

party secretary Zhang Baoshun, and Zhang introduced him to the local cadres. This is apparently rarely seen, and was interpreted locally as a signal that Xia had Zhang's full backing (*Southern Weekend* 2009). By spring 2008 the Shanxi government had decided to explore province-wide nationalization as a solution to Shanxi's accident problem (Section 5.2.2 below). This suggests that Linfen under Xia was being used as an experimental site (试点), to undertake a trial run of nationalization before the policy was rolled out province-wide, much like "property rights clarification" had also been first trialed in Linfen.

This would be nothing unusual: as Sebastian Heilmann (2008a, 2008b) has shown, Chinese policy makers routinely test out new policies in one or several locales before rolling them out more widely. As Heilmann also shows, while formal or informal support from higher-level patrons is crucial to enable local leaders to undertake policy experiments, local initiative often plays an equally vital role and China's political process has tended to accommodate bold local experimentation and reward local leaders for successful experiments. Thus it is quite plausible that personal initiative by Xia played an important role in the move to nationalization in Linfen.

5.2.2 The Move to Province-Wide Nationalization in Shanxi

5.2.2.1 Event Narrative and Policy Analysis

The Shanxi provincial government seems to have begun working on plans to nationalize much of the province's private coal industry shortly after nationalization began in Linfen. The sources generally ascribe this decision to Meng Xuenong, who had been appointed governor of Shanxi in Autumn 2007. In spring or early summer 2008, the Shanxi Coal Industry Bureau undertook a detailed investigation of the coal industry in each city and county of the province, with particular attention given to Linfen and Linfen's experiment with nationalization (Zhao and Chen 2013). By late April the first rumors were being reported in the business press that Shanxi was about to announce a policy of province-wide nationalization of coal mining (21 CBH 2008a, 2008d). Also in April – i.e., even before there had been an official public statement of provincial policy – Datong municipality began making preparations to have the Datong Coalmine Group (大同煤矿集团; one of the large provincially-owned coal SOEs) take over and consolidate most of the private mines in Datong. By early summer Datong had begun implementation (21 CBH 2008a, Datong 2008, cf. Song 2012).

Shanxi finally announced nationalization on 2 September 2008, in what subsequently became known as "Document Number 23" (23号文件).¹¹ Document 23 stipulated that

¹¹Because links have sometimes been drawn between Shanxi's coal nationalization and the worldwide Financial Crisis (e.g. Yang and Jiang 2012), it is worth noting that Shanxi's policy announcement preceded the collapse of Lehman Brothers by almost two weeks. While coal demand and coal prices

by the end of 2010, all mining companies that did not produce at least 3 million tons of coal would have to close. The total number of mines in the province was to be reduced by 44%, from 2598 to 1500, via take-overs, mergers and closures (Shanxi 2008, Huang 2011). This represented a marked radicalization of the targets set only the year before, in Shanxi's *Eleventh Five-Year Plan for the Coal Industry* published in July 2007. The *Eleventh Plan* had only called for reducing mine numbers to 2500 by 2010, and had set no minimum-scale requirement for coal companies. Now mine numbers were to be reduced to just 60% of the *Plan* target.

While the province's *Eleventh Plan* had already signaled a preference for having large SOEs take over private mines, consolidation by SOEs had not been obligatory (cf. Shanxi 2007b), and had occurred only rarely hitherto. Now this changed. Document 23 specified that only provincially-owned key state coal mining companies (省境内国有重点煤矿企业) and centrally-owned coal SOEs already active in Shanxi (在晋中央煤矿企业; meaning China Coal) could acquire mines without restrictions. Other enterprises would need special approval from the provincial government both to remain independent and to be allowed to acquire mines themselves (Shanxi 2008). The six largest coal-mining SOEs active in Shanxi¹² were singled out for special support. In particular, Document 23 sought to create local monopsonies for them by dividing the province's main 18 mining regions up among these six firms, so that each of these mining regions would be consolidated mainly by just one of these SOEs.

These measures contained two alterations on the way Linfen had sought to carry out nationalization. Firstly, while Linfen had made it clear that it much preferred the SOEs to assume *controlling ownership* over the private mines (收购、控股) (*China United Business News* 2008; cf. Linfen 2008b), it had also permitted them to instead only rent the mines from the private owners (租赁) or manage them in trust (托管). Under these latter structures, the SOE was supposed to have full operational control and management rights over the leased or entrusted mine, but the private still retained formal ownership. These options were not included in Document 23 (nor in subsequent nationalization-related documents): only transfers of controlling ownership stakes from the private to the SOE were envisioned in the provincial policy documents, not renting or entrustment (Shanxi 2008, 2009). In other words, provincial policy was even less accommodating to private owners than Linfen had been.

The second difference was that while Linfen had encouraged SOEs from across the country to take part in coal-industry consolidation within the municipality, Shanxi

collapsed in the Fall and Winter of 2008, by the time nationalization began to be actually implemented in summer 2009, prices and demand, too, had begun to recover much of their previous loss on the back of China's huge stimulus packet (cf. Figure 4.12 in Chapter 4).

¹²These six firms were the Datong Coalmine Group (大同煤矿集团), the Shanxi Coking Coal Group (山西焦煤集团), Yangquan Coal Industry Group (阳泉煤业集团), Lu'an Coal Group (潞安矿业集团), Jincheng Anthracite (晋城无烟煤集团), and China Coal Energy Pingshuo Company (中煤能源平朔公司). The first five of these firms are provincially-owned SOEs; China Coal Pingshuo is the main coal-producing subsidiary of the centrally-owned China Coal Group.

sought to restrict participation as much as possible to Shanxi firms – above all, to the six provincial and central key state coal groups listed in Footnote 11 – and to create the just-mentioned local monopsonies for the key state coal groups (*Caijing* 2010c, Zhao and Chen 2013, Interviews¹³). This appears to have been a direct response to the experience in Linfen, where competition among the SOEs for mines to consolidate led to sharp increases in the prices demanded by mine owners, as they played off competing bids against each other (*Southern Weekend* 2008c). In response to resistance from local officials this would ultimately be somewhat watered down, but only, it seems, in ways that benefited local governments, not mine owners. While local governments would ultimately be able to bargain with competing SOEs over which firm would get to consolidate the mines in the locality, the mine owners themselves were generally not given a choice over which SOE to sell to. The price-setting power this gave the acquiring SOE lay at the root of much of the ensuing conflict between Shanxi and the mine owners.

5.2.2.2 Initial Local-Government Resistance

In Chapter 4 we saw that subprovincial officials – in particular, officials at the sub-municipal (county, township) level – tended to much prefer having private companies run the local coal industry, rather than provincially or centrally-owned SOEs, and that there is evidence that local governments would be very unhappy about the consequences of nationalization for local rent extraction, fiscal revenue, and employment. Thus, we should expect there to have been substantial resistance among local officials to nationalization. Demonstrating that this was so, however, is somewhat harder because China's political culture does not encourage the open expression of conflict between different bureaucracies or levels of government. However, there are strong indications in the source materials that resistance was in fact substantial. (As we will see in later sections, there was also strong resistance and protests from mine owners and civil society, as well as from the provincial government of Zhejiang, for Zhejiangites lost much money due to the nationalizations.)

Even before province-wide nationalization plans were announced in September 2008, the efforts by the municipal leaders in Linfen and Datong to consolidate the private coal mines under SOEs appear to have run into opposition from local officials. A report on nationalization in Linfen in *Southern Weekend* (2008c) provides some detail on this. The article quotes a mine manager (矿长) from an SOE active in Linfen, who explained that acquisitions were proceeding slowly because county and municipal bureaus were unsupportive: since they would lose most regulatory powers over the mines acquired by the SOEs (and thus most scope for extracting rents from them), they were unenthusiastic about seeing the mines consolidated under the SOEs. The electric-power

¹³Interviews 9 (Shanxi journalist specialized on energy and environmental topics), 10 (Chinese scholar who works mainly on the coal industry).

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bureau had even capped power supplies to acquired mines. An individual from Linfen's Xiangning county (乡宁) coal industry bureau told the journalist that

The mine bosses don't want the current coal-mine consolidation, the big enterprise groups don't want it, and some government departments don't want it either. For instance in Xiangning county, they [the government bureaus] would much prefer consolidation to be undertaken within the county boundaries [i.e., by local firms], and do not want to rely on the help of outsiders [i.e. the large SOEs] [to implement consolidation]. (现在资源整合是小煤矿主不愿意，大集团也不愿意，政府一些部门也不愿意。比如乡宁县，他们更愿意将煤矿整合在本县之内，而不愿意假以人手。)

Similarly, a Linfen coal-mine owner averred that "only the top government leaders really want the consolidations [of the local mines under the SOEs], because thereby they can transfer responsibility for safety to the provincial authorities" (*Southern Weekend* 2008c).

There seems to have been similar opposition in Datong. Just as in Linfen, advocates of consolidating the mines under SOEs pointed out that after Datong Coalmine Group assumed ownership of the mines, Datong Coal would be responsible for safety and "even if accidents happen, local officials will be under less pressure" (最为重要的是，减少了煤矿安全事故，即使发生事故，地方官员也不会有以前那么大的压力) (21 CBH 2008a, quoting a deputy county head). However, even advocates had to admit that once the SOE controlled the mines, "local administrative power [over the mines] will weaken, which is certainly not as convenient [for the local government] as when they held direct administrative power [over the mines]" (地方行政管理职能弱化了，肯定不如自己直接管理的方便) (21 CBH 2008a, quoting the head of the Datong Municipal Finance Bureau).

Datong and later Shanxi both decreed that when the SOEs acquired mines, they would have to register them locally as subsidiary companies (子公司) rather than as branch companies (分公司), to ensure that consolidation would not alter the existing flow of taxes (21 CBH 2008a, Shanxi 2008). However, what was really at issue was not so much local officials' access to regular *tax* revenues, as their ability to extract informal "grey" and "black" payments as well as their scope to control local mining activities, all of which depended on preserving their administrative power over them (cf. Chapter 4). Accordingly, resistance and foot dragging seems to have been rife in Datong, too. Speaking specifically about Datong, one "industry insider" (业内人士) told the *21st Century Business Herald* that

while the Shanxi leadership wants to consolidate coal mining in the large mines, the lower levels are resisting fiercely. The local governments and

small mine [owners] absolutely do not want to give up [the mines they control]. (山西省上有意把煤炭资源往大矿集中，但下面顶得厉害，地方政府和小煤矿肯定不想放手.) (*21 CBH* 2008a).

Even Yang Ruiqin (杨瑞), an official from Datong's State Assets Commission who was responsible for drawing up nationalization-related policy, had to admit as much. He told journalists that

Resistance to [having Datong Coal take over the mines] is very great. No one wants to give up the benefits they control. Thus, at the grass roots the attitude is to drag out [mine consolidation by Datong Coal]. Every day you that can drag it out is an additional day that you can collect profits and benefits. (工作中阻力很大，实际利益谁都不想放手，下面的态度就是拖，能拖一天就多得一天的利.) (*21 CBH* 2008a).

Resistance did not end when governor Meng Xuenong announced the province-wide consolidation of small mines by the large SOEs in September 2008. On the contrary: Based on an interview with a senior individual from the Shanxi coal sector,¹⁴ Zhao and Chen (2013: p. 94) report that at mobilization meetings (动员会) conducted in Changzhi and Datong in early September, the policy ran into “intense opposition” (激烈反对) from the local governments. The strongest opposition came from the major coal-producing counties. *21st Century Business Herald* similarly reported that Meng faced “contradictions and intense resistance from the localities” (地方上矛盾交织，阻力重重), which he was unable to break (*21 CBH* 2008e).

Shortly thereafter, Meng was forced to resign due to the September 2008 “Kuiba” accident. With the main provincial leader pushing nationalization removed, the policy “became deadlocked” (搁浅) (Zhao and Chen 2013: p. 94). While it is fairly clear that the new governor, Wang Jun, was chosen for his coal and mining safety-related expertise¹⁵ and while Wang had previously headed the State Agency for Work Safety, which advocated for nationalization (cf. Chapter 2), initially he tread carefully. Instead of directly continuing Meng’s nationalization initiative, during Fall and Winter 2008 he seems to have restricted himself to convening study meetings to ascertain the feasibility of pursuing Meng’s initiative (Zhao and Chen 2013: p. 94). By November 2008 doubts

¹⁴The information is attributed to “山西煤炭行业某主管”, which could refer to either an owner or senior manager of a coal company, or to a senior official from the coal bureaucracy. I understand that the authors have close personal connections to Shanxi political circles.

¹⁵Wang Jun began his working life as a coal miner in Datong, ultimately rising to become first head of the Datong Coal-mine Bureau (大同矿务局; today, the Datong Coal Mine Group 大同煤矿集团) and then Deputy Minister for the Coal Industry. Immediately prior to his appointment to the Shanxi governorship he was serving as director of the State Work Safety Agency. See China Vitae (n.d.).

CHAPTER 5. CHANGING PROVINCIAL COAL-INDUSTRY POLICIES AFTER 2007

were being expressed among Shanxi SOE managers about whether he would be willing to force through nationalization (*Southern Weekend* 2008c).

What got nationalization started again, it appears, was a further major mining accident. Before turning to this, however, we should consider the paradox that, while local-government resistance appears to have been substantial, nationalization was *also* initiated and proactively pursued by the top municipal leaders of Linfen and Datong.

To resolve this paradox we must recall the discussion in Chapter 4 concerning the divisions within local government: while local leaders and their subordinate officials at all levels generally share a common interest in high economic growth, growing tax/fee revenue, and maintaining “stability” (which includes maintaining working relations with the main local political and business interests), officials and leaders at different levels have very different career prospects (Kostka and Yu 2014, Smith 2015). Municipal party secretaries and mayors have realistic chances of promotion to senior positions in the provincial government; township and county leaders and ordinary municipal officials do not. County leaders have little chance of even becoming municipal leaders (Kostka and Yu 2014). Accordingly, we should expect municipal leaders to be much more willing to obediently implement provincial policies damaging to the local economy and to local authorities’ grey and black income streams than the rest of municipal and sub-municipal officialdom will be: the municipal leaders will likely soon leave the locality¹⁶ and may go higher; the others will not.

The very substantial influence that age limitations and personal relations to higher-level leaders have on prospects for promotion (Landry 2008: pp. 87–88, Mei 2009: pp. 44–45, 70; Kostka and Yu 2014) suggests that even among municipal leaders, eagerness to carry out provincial policies may vary, with younger and better-connected cadres likely to be more eager to do so than municipal leaders nearing retirement age or lacking the strong relations to the provincial leadership that can facilitate career advancement.

These considerations provide plausible reasons for the eagerness of the top leaders in Linfen and Datong, Xia Zhengui and Geng Yanbo (耿彦波), to pioneer nationalization. Recall that Xia was parachuted into Linfen in the aftermath of the December 2007 accident with, it appears, a clear mandate from the provincial leadership to boldly experiment with nationalization in order to get accidents under control. Success in this mission would advance his career; failure would stall it (indeed, the September 2008 “Kuiba” accident effectively finished it¹⁷), and at 52 years of age he was then still

¹⁶Average tenure of municipal leaders is only about 2 years (Kostka and Eaton 2012).

¹⁷After his dismissal, Xia did not receive another appointment for five years. In 2013 he was made deputy head of the Shanxi United Front Department – a position beneath the Linfen Party Secretariatship both in formal rank and substantive power. Born in 1956, he was now 57 years of age and thus effectively out of the race for significant further promotion, since cadres beneath the provincial level become ineligible after they pass 59. Indeed, no further promotion appears to have been forthcoming for Xia.

young enough to be able to make the jump to the provincial level. Geng Yanbo too had strong relations to the provincial leadership, which backed his agenda of aggressive urban renewal and industrial clean-up (Kostka and Eaton 2012). Moreover, being just 50 years old in 2008 he was still young enough for significant career progression, provided he impressed his superiors.¹⁸ In short, Xia and Geng match the profiles of cadres whom we would most expect to aggressively push through provincial policy priorities – and whom we would expect to be most sensitive to the career risks posed by large accidents.

5.2.2.3 Tunlan, Central Intervention and the Resumption of Nationalization

On 21 February 2009 an explosion at the state-owned Tunlan mine killed 74 workers. As Figure 5.1 shows, this again prompted a surge of media coverage. Based on their interviews, Zhao and Chen (2013) claim that the Tunlan accident was decisive for pushing Wang Jun to resume nationalization: the accident meant that he “had no choice but to speed up coal-industry restructuring” (不得不加快煤炭行业重组的步伐). He duly held numerous work conferences (工作会议) to plan how to go about it (2013: p. 94). At this point, top-level leaders seem to have made an authoritative intervention into the Shanxi policy deliberations: According to a speech by the vice-mayor of Changzhi city (长治), in early March 2009 (i.e. just a few weeks after Tunlan) Xi Jinping – at that point the sixth-ranked member of the Politburo Standing Committee – visited the Shanxi delegation at the National People’s Congress and “instructed” (指示) Shanxi to “speed up coal-mine mergers and restructuring, and aggressively reduce the number of mines in the province to about 1000.” (Shang 2010).

It appears that Tunlan, this central intervention and/or Wang Jun’s own forcefulness were decisive for bringing resistance from local government and/or other parts of the Shanxi administration to an end. While there are reports of foot-dragging and covert attempts to weaken closure and nationalization requirements after spring 2009 (e.g. 21 CBH 2010a), outright resistance from local governments to nationalization seems to have ended at this point. Indeed, while not referring explicitly to Xi’s intervention, one interviewee thought that central approval of the Shanxi leadership’s plan had been important for bringing debates within Shanxi officialdom about whether nationalization was feasible and affordable to a close (Interview 85).¹⁹

The final policy decision was published on 15 April 2009. Shanxi issued a *Notice*, dubbed “Document No. 10” (10号文件), announcing that coal-industry consolidation would recommence and be sped up. While the *Notice* never explicitly spoke of nationalization

¹⁸Indeed, Geng has been much luckier than Xia. No major accidents occurred on his watch, and in 2013 he was made mayor of Taiyuan, the provincial capital and Shanxi’s most important city.

¹⁹Former manager at a Shanxi coal and heavy industries consulting company.

– preferring the term “coal-mine enterprise mergers and restructuring” (煤矿企业兼并重组) – the stipulations of the *Notice* meant that its implementation would necessarily result in the nationalization of most of Shanxi’s private mines. Indeed, in crucial respects the measure and targets in the *Notice* further radicalized those announced by Meng Xuenong in Document 23 from September 2008.

Before analyzing Document 10 and its implementation further, we should address the curious fact that an accident in the *state-owned* Tunlan mine apparently served as the decisive spur to nationalizing most of Shanxi’s *private* mines in order to improve mining safety. This paradox can be resolved with reference to the relatively better safety performance of the large provincial and central SOEs. The Tunlan accident did not materially change the fact that most of the large mining accidents, in particular, occurred in the private and county or municipally-owned mines.²⁰ The significant improvement in safety performance in Shanxi’s mines after nationalization tends to support the government’s decision: From the completion of nationalization at the end of 2010 and October 2015, the province suffered only *one* mining accident with 20 or more accidents, and the total number of coal mine-related fatalities continued to decline swiftly and steeply (cf. Table 5.1).²¹

What the Tunlan accident *did* however do, was to once again place Shanxi in the media headlines over mining accidents (cf. Figure 5.1). For a provincial leadership under great pressure to rapidly improve safety performance and end large mining accidents it thus made sense to focus on the small-scale private mines, where the accident problem was largely concentrated.

5.2.2.4 Document 10 and Concessions to Local Governments

Document 10 radicalized key measures of Document 28 from September 2008, but also offered several concessions to local governments. The total number of mines was now to be reduced to just 1000, not to 1500 as had still been the target in Document 23. Each municipality was given a target for post-consolidation mine numbers. Minimum-size requirements were raised: while Linfen had still set a minimum-size requirement of just 300,000 tons production capacity, Document No. 10 decreed that all mines smaller than 900,000 tons were “in principle” (原则上) to be either acquired and enlarged or

²⁰Between 2000 and the completion of nationalization in Shanxi at the end of 2010, the province suffered 48 accidents with 20 or more fatalities. Only seven of these took place in the mines run by the large SOEs, even though these produced about 50% of provincial coal output.

²¹The accident in question occurred in April 2015 at a mine operated by the Datong Group, and killed 21 people (Safehoo.com 2015).

Indicator	Annual Average 2000-2007	2009	2014
Total Fatalities	483	202	35
Fatalities per Mio. Tons Coal	1.2	0.33	0.036

Table 5.1: Safety Performance in Shanxi Before and After Nationalization

Sources: CCIYB 2001-2012, Safehoo.com, *Shanxi Daily* 2014b

merged with others, or closed. The mines were to be mainly consolidated by provincial and central SOEs, though a small number of very large privates were permitted to do so, too. In the event, only 59 of the previously roughly 2000 private mining companies in Shanxi survived (cf. Huang 2011). Strikingly, even some of Shanxi's largest and best-connected private companies seem to have felt compelled to allow large SOEs to take majority stakes in them. This behavior was dubbed “putting on red hats” (戴红帽子) to acquire “protective umbrellas” (保护伞); i.e. acceding to partial state ownership in order to obtain political coverage for continued operation.²²

In what was probably a response to the previous resistance from local governments, the stipulations of Document 10 and the way it was subsequently implemented contained several apparent concessions to them. For one, the minimum-scale requirements were handled with some flexibility in order to enable county governments to retain some mines under their own direct control. Document 10 stipulated that only those enterprises would be permitted to buy up other mines that had a total annual production capacity of at least 3 million tons and one fully-mechanized mine of 1.2 million tons capacity, though exceptions could be made should the shaft be smaller than 1.2 million but larger than 900,000 tons (Shanxi 2009).

²²The clearest case of this is the Liansheng Group (联盛集团) owned by Xing Libin (邢利斌). Xing was one of the richest individuals in Shanxi and had deep connections to provincial and local leading officials. Liansheng was also one of the largest private coal companies in the province (*Caixin Online* 2014). Nonetheless, Xing let China Resources Group, one of the large centrally-owned electricity SOEs, take a majority stake (控股) in Liansheng (*Caijing* 2010c), though Xing remained in operative control of the company and continued to own 42% of the stock (*Qianzhang Evening News* 2012, *Caixin Online* 2014). While lack of detailed information about the deal and Liansheng's business situation mean that we cannot be certain, the timing suggests that its likely purpose was to “put on a red hat”. The Jinhaiyang Energy Company (金海洋能有公司) – another very large private that arranged for itself to be acquired by China Coal in 2009 – seems to have been a similar case of “putting on a red hat” (Interview).

Enforced literally, this would have prohibited not only most private but also most local-state mines from acting as consolidators (兼并主体; i.e., the firms that acquired other).²³ In practice, counties without enterprises or mines that met these conditions bargained (讨价还价) with the province, or got special permits (特批) to merge local enterprises to create an authorized, usually local government-owned consolidator, so that not all of the local mines would fall under the control of the large SOEs (Zhao and Chen 2013: pp. 94, 101–102).

While minimum-scale requirements seem to have been enforced strictly for mines under continued private ownership, local governments and large SOEs were able to continue operating mines smaller than 900,000 tons.²⁴ The aim of reducing total mine numbers to just 1000 was slightly diluted, too: most municipalities were able to preserve 5% to 10% more mines than had originally been allotted to them, and ultimately 1053 mines survived (Huang 2011, cf. Shanxi 2009).

In short, as the level of government mainly responsible for implementing nationalization on the ground, the counties seem to have enjoyed some scope for structuring it in their favor. Yet this flexibility had limits. According to Zhao and Chen's (2013) county-level interviewees, they were under considerable pressure to allow the large SOEs to take over a substantial share of the local mines, and likewise each of the seven provincial coal SOEs was ordered to acquire at least 100 of the local mines (2013: pp. 100–102, 106). Ultimately the provincial and central firms got about half of the mines subject to consolidation, while county and municipally-owned firms took about 30%. 20% remained under private ownership (Huang 2011).

The second concession of Document 10 was to quietly drop Document 23's stipulation that consolidation in each mining district was to be led by just one of the large SOEs. Instead, the SOEs could – and did – acquire mines across the entire province (*Caijing* 2010c; Zhao and Chen 2013). In practice, acquisitions of private mines by the SOEs involved extensive and sometimes acrimonious negotiations between the local county and municipal governments and the SOEs about which mines they would acquire on what conditions and about who would be responsible for compensating owners (Interview 86, *Caijing* 2010c). Having more acquirers competing for mines gave the local

²³In 2008, prior to nationalization, only 197 of Shanxi's mines were larger than 900,000 tons (Huang 2011), and most of these will have belonged to the 140 mines owned by the provincial and central SOEs (cf. CCIYB 2008: p. 407)

²⁴The Powerpoint Presentation from the Shanxi Coalmine Work Safety Agency (Huang 2011) reports that after consolidation, the average size of the mines acquired by the provincial SOEs was 820,000 tons, while the average size of the mines controlled by local state companies ranged from 750,000 to 850,000 tons. Conversely, the average size of mines that had remained private was 1 million tons. While we cannot be certain, it is unlikely that these averages are driven by outliers because of the large number of the mines involved (even the smallest category, privately-owned mines, still contains 188 mines) and the effective maximum possible mine size (few mines in Shanxi are larger than several million tons). In short, the numbers show that state firms *definitely* enjoyed some leeway to preserve mines that were smaller than officially required, and strongly, but not definitively, suggest that private firms enjoyed no such leeway.

governments greater leverage when negotiating terms. For instance, Linfen made its consent to the acquisition of several valuable coking-coal mines by the Yangquan Group conditional upon Yangquan also taking over and continuing to operate a number of – much less valuable – steam-coal mines, which the Group had little desire to acquire because of the cost of upgrading them (*Caijing* 2010c). SOE managers told similar stories about negotiations and bargaining with the local governments about mine acquisitions (Interviews 38, 86).²⁵

Document 10 also added two provincial coal-trading companies²⁶ to the group of now eight provincial and central coal SOEs that were to act as the primary consolidators. For the local governments this not only had the advantage of further increasing the pool of competing SOEs, but also apparently helped maintain employment levels: lacking trained mining personnel, the trading companies were obliged to retain more of the existing staff than the traditional coal-mining SOEs commonly did (*Caijing* 2010c, Zhao and Chen 2013).

5.2.2.5 Implementation and Continued Resistance

Despite these concessions, the nationalization process remained conflict-ridden. Competition among the SOEs for high-value mines seems to have provided only limited scope for local governments to extract concessions, because ultimately mines would have to be either acquired or closed. Commenting on the efforts of local governments to play SOEs off against each other, one SOE manager involved in such negotiations told *Caijing Magazine* (2010b) that

The local governments are fickle in their affection and always believe that ‘foreign monks know the scriptures better’. But in fact the large SOEs are all the same; no one is willing to just casually give local governments spending money.

As we saw in Chapter 4, the outcome from nationalizations ultimately left many local governments very dissatisfied. Yet while negotiations between the local governments and the large SOEs seem to have often been complicated and conflict-ridden, amidst local accusations that the SOEs “insufficiently supported local-government work [financially]” (大集团对地方工作的支持力度不够) (*Caijing* 2010c, cf. also Economy & Nation Weekly 2010a), ultimately, the local authorities had little choice. As noted above, approval from central leaders (or at least from Xi) seems to have helped end the policy debate (and thus any scope for legitimate resistance) within Shanxi officialdom. The province also ran a large-scale campaign targeting corruption in the coal and coking

²⁵Mid-level manager from provincial SOE 1 (38), senior manager from provincial SOE 2 (86)

²⁶Shanxi Coal Transport (山西煤炭运销集团公司) and Shanxi Coal Export Import Group (山西煤炭进出口集团公司).

sectors in parallel with nationalization, and reportedly used this to threaten dissident cadres (*EO* 2011d, *World Vision* 2009, Interview 20).²⁷

Yet while serious resistance from local governments in Shanxi seems to have died down after spring 2009, Shanxi now ran into resistance from a powerful coalition of angry mine owners, liberal media outlets and intellectuals worried about “reform reversal”, and the Zhejiang provincial government.

Central to the mine owners’ protests were the prices paid by the SOEs for their mines. These were calculated on the basis of the value of the equipment and of the resource-usage and compensation fees (资源价款、使用费) that the state had originally obliged the mine owner to pay in return for granting them a mining right (采矿权). However, this seems to have often been substantially below what the mine would have fetched if sold at current market prices. Moreover, during the “Property Rights Clarification” movement (when coal bosses were forced to buy new mining rights), many had understated their reserves to reduce fees. Owners however had little choice: if they refused to sell, they would simply be closed down. A flurry of tax inspections was also used to coerce hold-outs (*World Vision* 2009, Zhao and Chen 2013). By all accounts, this forced mine owners to often sell at prices significantly below market value (*Garnet* 2009; *CYD* 2009, 2010; *Chinese Business View* 2010; *EO* 2011c; *People’s Daily* 2009; *Economy & Nation Weekly* 2010a; Interviews 3, 12, 38, 39²⁸). This was admitted even by some SOE managers, who argued, however, that it was not the SOEs’ responsibility to foot the bill for the government’s policy decisions (*Chinese Business News* 2009), and that they could not afford to pay the mine owners’ asking prices if they were still to have money left over to operate and invest in the new mines (*Economy & Nation Weekly* 2010a). Other state managers and officials however argued that the prices paid were “fair” or “rational”, and that it was unreasonable to expect the state to compensate bosses for “irrational” prices that they might have paid for mines during speculative market fevers (Shang 2010, Interview 38²⁹).

Unsurprisingly, this left the owners incensed. Investors from Zhejiang – who reportedly had owned or invested in around 600 mines in Shanxi – were said to have lost between RMB 25 and 50 billion in total (*Caixin* 2012, *CYD* 2010b). The hardest hit bosses were those who had only bought their mines one or two years before, since they had often paid very high prices for the mines but been unable to produce much due to the frequent “production stop and rectification” orders (停产整顿) issued in 2007 and 2008 in the aftermath of accidents and during the Olympics. Many of these people made net losses on their coal-mine investments, with sometimes grievous financial consequences

²⁷Chinese scholar who works on the coal industry and was able to discuss Shanxi’s coal consolidation with provincial officials.

²⁸Journalist specialized on energy issues (3), senior scholar from the NDRC Energy Research Institute (12), mid-level manager of a provincial SOE (38), official from a municipal coal industry bureau in Shanxi (39).

²⁹Mid-level manager of provincial SOE 1.

(*Southern People Weekly* 2009, *Chinese Business News* 2009, *EO* 2011c). To add insult to injury, the SOEs often proved slow about paying the moneys owed (*21 CBH* 2010a, *CYD* 2010b, *Caijing Online* 2009, *Caijing* 2010c, Interview 9³⁰).

Protests by the mine owners seem to have taken two main forms: Government lobbying through official channels, and soliciting favorable coverage from liberal media outlets in order to generate public pressure. Tacit support from the Zhejiang government seems to have played an important role in this. Officials from the Zhejiang government conducted field investigations (调研) in several cities of Shanxi in summer 2009, visiting coal companies owned by Zhejiangites. It is likely – though I have no direct evidence for this – that Zhejiang first sought to resolve points of conflict through quiet negotiations. If so, however, this did not bear fruit, and in Fall 2009 the Zhejiang Commercial Investment Promotion Association (浙江商资本投资促进会) – an entity operating under the auspices of the Zhejiang Government’s Economy and Digitization Commission (浙江省经信委) – took the remarkable step of semi-publicly petitioning the National People’s Congress, the State Council and the Chinese People’s Political Consultative Conference to investigate the “legality” (合法性) and “rationality” (合理性) of Shanxi’s policies. Officials and lawyers from Investment Promotion Associations alleged that Documents 23 and 10 egregiously violated national laws and the “spirit” (精神) of central-government coal policy (*21 CBH* 2009c, *Caijing* 2010b).³¹

Concurrently, mine owners also went to the media. The Investment Promotion Association promptly passed the content of the above-mentioned petition on to journalists, and spokespersons gave media interviews (*Oriental Outlook* 2010, *21 CBH* 2009c). In order to generate additional attention and further stir up media discussion, the Associations also organized a conference in Hangzhou, Zhejiang, to coincide with its petition, on “Consistency in Local Industrial Policy and Investor Confidence” (地方产业政策延续性与企业投资信心). Shanxi was invited to send delegates to participate – something Shanxi officials apparently reacted to with consternation (*EO* 2011c) – but refrained from doing so. In response, the Zhejiangites placed empty chairs marked as “reserved for the representatives of the Shanxi Provincial Government, Shanxi Development and Reform Commission, and Shanxi Coal Industry Department” on the conference panels (*21 CBH* 2009c, *China Energy News* 2009, *Oriental Outlook* 2010).

³⁰Shanxi journalist specialized on energy and environmental topics.

³¹The claim about legal violations may well be true; but the claim about violating the spirit of central-government policy is questionable. Association lawyers argued that while national coal policy as set out in the State Council’s 2005 *Opinion on Promoting the Healthy Development of the Coal Industry* had merely provided “administrative guidance and encouragement” (行政引导鼓励政策) for large enterprises to acquire small mines, Shanxi had transformed this into an “obligatory local administrative order” (地方行政命令强制). This was true, but it is questionable whether this “seriously deviated” (严重背离) from central policy as opposed to just radicalizing it. Increasing the state share of the coal industry had strong support both from at least some top leaders and from the key bureaucracies responsible for coal-related policy (NDRC, SAWS), and this found expression in key coal-related policy documents, including the *Opinion*. Indeed, as we will see below, after Zhejiang’s protests the NDRC also came out in support of Shanxi’s policy.

The mine owners' plight received relatively extensive and not unsympathetic treatment in the media, especially in liberal commercial outlets like *Caijing*, *Caixin*, *Economic Observer*, and *21st Century Business Herald* and other commercial outlets of the Southern Media Group. There are rumors that mine owners sometimes paid journalists for sympathetic coverage. While I was unable to confirm these, it would be surprising, given the level of corruption within China's media (cf. Zhao 2008: pp. 82ff.), if paid articles had *not* been solicited. However, it would be wrong to reduce the media uproar triggered by coal nationalization just to the influence of owners' money. Rather, the spectacle of large-scale, state-orchestrated nationalization of private industry appears to have tapped into wider concerns among liberal intellectuals and journalists about economic and political reforms having become bogged down or suffering reversal (逆转) in the Hu/Wen years, as a resurgent state sector played an increasingly active role in the economy, policy came more and more to rely on massive state-led investment projects to drive growth, and a powerful domestic security ("stability preservation") apparatus was constructed.³²

These concerns tended to be expressed with the phrase *Guo Jin, Min Tui*; "the state advances and the private sector retreats" (国进民退), which was widely used to describe both Shanxi's policy as well as the broader resurgence of the state sector in the late Hu/Wen years. The phrase was an ironic inversion of the slogan "the private sector advances and the state retreats" (*Guo Tui, Min Jin*) which had been used to characterize SOE reform in the 1990s (Anderson 2010). It seems to have first become current in 2004 in the context of Wen's policy of "macro-economic recontrol" (宏观调控) (Naughton 2004), but its usage only really took off in 2009 (cf. Figure 5.2).

Interestingly, initially the phrase appears to have had no clear political-ideological connotation. In 2008, the magazine *China Coal Industry*, which is published by the State Agency for Work Safety, had still *praised* Linfen for carrying out "Guo Jin, Min Tui". But by 2009/2010 the phrase had acquired a distinctly critical flavor. The clearest evidence for this are censorship instructions issued in 2010, which prohibited media from "seizing on" the accident at the state-owned Wangjialing mine to "criticize 'Guo Jin Min Tui' in the mining industry" (不可借题 [王家岭矿难] 发挥如批评矿业“国进民退”) (*China Digital Times* 2010), as well as the fact that central and provincial officials sought to energetically refute the allegation that "Guo Jin Min Tui" (*GJMT*) was taking place at all, either in Shanxi or in the wider economy (e.g. Ji 2010).

Usage of the phrase *GJMT* in media articles and online commentary can thus serve as a rough indicator for the amount of critical commentary. As Figure 5.2 shows, the number

³²During my stay in China in 2012–2013 the theme of "reform reversal" (改革逆转) frequently came up in conversations with liberal intellectuals, and Shanxi's coal nationalization was often mentioned as an example. For some high-profile examples of this discourse see the writings of Tsinghua sociologist Sun Liping (2012, 2013) and the work produced by the Unirule Institute of Economics (天则经济研究所), esp. Shen et al. 2011.

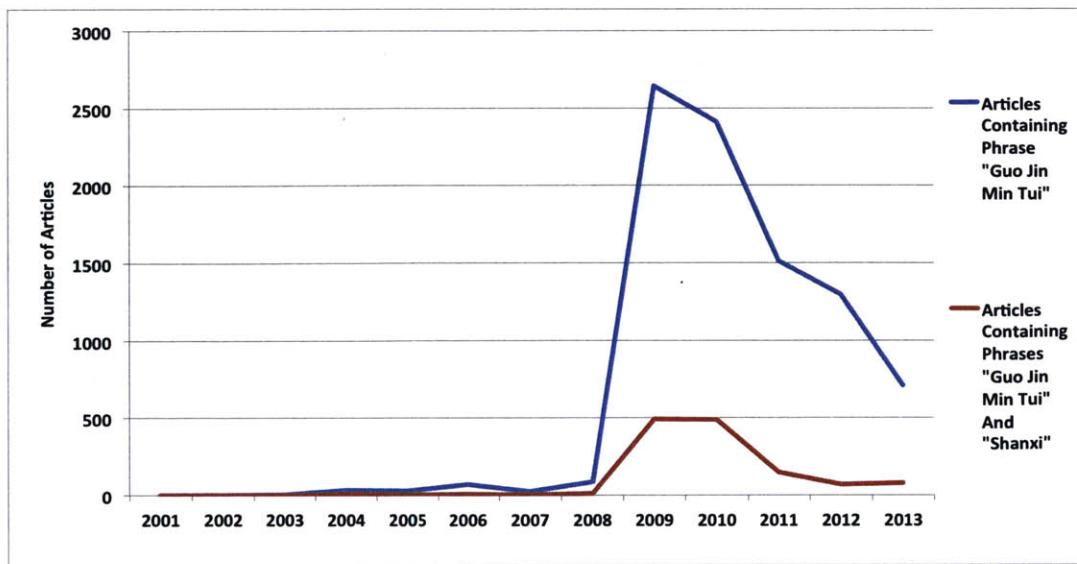


Figure 5.2: Use of the Phrase “Guo Jin, Min Tui” in the Media
Source: Sina.com

of articles containing both the phrase *GJMT* and the word “Shanxi” exploded in 2009 and 2010. There are several further pieces of evidence to support the view that Shanxi really did find itself facing extensive public criticism over its coal-mine nationalizations. One is the decision by *Prosecutorial Daily* (检察日报), one of the main newspapers of China’s legal establishment, to include the “Shanxi Coal Mine Consolidation Events” (山西煤矿整合事件) within its list of the “Top Ten Events Touching on the Constitution in 2009” (2009年度十大影响性宪法事件). That censors promptly stepped in to demand the removal of this particular event from the list (Clarke 2009) indicates how sensitive at least parts of the state were to these criticisms.³³

A further piece of evidence is that Shanxi and senior central officials who supported Shanxi’s policies felt obliged to engage this discourse, to try to win the battle for public opinion. Thus Shanxi responded to the Zhejiang conference by organizing its own counter-conference of scholars and “experts” (专家) who publicly endorsed Shanxi’s policy (*Southern People Weekly* 2009). Officials from the State Assets Commission (SASAC) and the NDRC published pieces to refute the allegation of *GJMT* (e.g. Ji 2010) and to express support for Shanxi’s policy. Most prominently, the head of the National Energy Administration (国家能源局) and Deputy Director of the NDRC, Zhang Guobao (张国宝), wrote an op-ed for the *People’s Daily* stating that while Shanxi had come in for criticism from “public opinion” (社会舆论), he “personally” supported Shanxi’s actions. While Shanxi’s measures amounted to “poking a hornet’s nest” (捅马蜂窝) of economic interests and legal questions, Zhang wrote, consolidating mining

³³ Amusingly, *Prosecutorial Daily* responded by removing the offending item from the online version of the list, but kept the list’s title and simply left the (numbered) slot for the third event (where Shanxi had been placed) blank. Cf. Clarke (2009), *Prosecutorial Daily* (2009).

under big (state) enterprises was crucial for improving safety. Shanxi's willingness to take bold and resolute action (壮士断腕的决心) was therefore to be praised (Zhang 2010).

In fact it appears as though the societal uproar was sufficient as to force Shanxi leaders to consider abandoning or at least modifying nationalization. According to an individual "close to the Shanxi government" quoted in the *Economic Observer* newspaper, by Fall 2009 the level of disapproval for Shanxi's policy expressed by "public opinion" was such that a fundamental decision about whether or not to proceed with the coal-industry reforms had to be taken, which could only be done by the Center (*EO* 2011c).

In response, in December 2009 the State Council sent an investigation team (调查组) to Shanxi staffed by officials from the NDRC Department for System Reform (体制改革司) and the Coal Department (煤炭司), to examine what was happening (*Caijing* 2010b). It should be noted that the NDRC – and the NDRC energy bureaucracy, to which the Coal Department belonged, in particular – seem to have been strongly in favor of Shanxi's measures (witness NDRC Deputy Director Zhang's public support). Given its expertise in both macro and sectoral-level industrial planning and policy, the NDRC probably *was* the obvious agency to which to depute the task of investigating Shanxi's policies. But in light of NDRC leaders' apparent policy preferences, this choice also suggests that the team was being structured so as to deliver a preconceived conclusion. The fact that, once in Shanxi, the team only conducted field research in single city (Changzhi) and duly gave this city a very positive appraisal (高度评价) (Shang 2010), increases this suspicion. According to a speech by the deputy mayor of Changzhi (who fulsomely praised his city for "winning glory for Shanxi" [长治的做法为山西争了光] by impressing the investigation team), once the team had reported back, five Standing Committee members and two further Politburo members wrote a memo (作出了批示), "fully approving" (充分肯定) Shanxi's nationalization and closure policy (Shang 2010).

This memo and endorsement of Shanxi's policies by Standing Committee and Politburo members seems never to have been made public. While there are scattered references in some newspaper articles to high-level support for Shanxi's actions (*Caixin* 2012, *Caijing* 2010b), the only explicit mention of it that I found was in the (cited) speech of a deputy mayor of Changzhi, which was buried on the city's website.³⁴ Instead of a public declaration of support by the very highest leadership, it was left to the NDRC and the National Energy Administration (NEA) to announce central approval for Shanxi's actions. It should also be noted that this memo was authored by only five of the Standing Committee's nine members. Below, I will return to the significance of these issues.

³⁴This source is nevertheless very reliable. The speech is an official document. It is hard to imagine that the vice mayor would gratuitously invent claims of such gravity or repeat hearsay in a document of this kind.

On 5 January 2010, the NDRC, NEA and the Shanxi provincial government gave a joint press conference in Beijing to announce that Shanxi's coal-industry restructuring had been a great success, with over 98% of the merger and consolidation agreements having already been signed. NEA deputy director Wu Yin (吳吟) declared that the coal-industry consolidation Shanxi had implemented was "appropriate to the industry's development trend" and should be "spread to the entire country" (要向全国推广) (*Caijing* 2010a, 2010c). Two weeks later, the head of the NDRC, Zhang Ping (张平) also visited Shanxi and declared that Shanxi's industry consolidation had been "extremely necessary" (非常必要) (*Caijing* 2010b). From this point on, implementation in Shanxi seems to have proceeded fairly smoothly, and by May 2011 the Shanxi Coal Bureau could declare coal consolidation to be "basically complete" (*Caixin* 2012).

5.3 The Role of the Center in Shanxi's Coal Nationalization

I next address the issue of how to understand the Center's role in the decisions about whether to nationalize the coal industry in Shanxi and, by extension, the other provinces. The question is, was nationalization the result of an authoritative order from the top leadership (Standing Committee, Politburo or State Council) or some other central-government body that Shanxi then simply implemented, or was the decision taken by the provincial leadership entirely independently of the Center, or was it in some sense a joint decision, to which both provincial and central leadership contributed? To facilitate the discussion of these issues here, I next briefly summarize the various instances of central-state intervention (Section 5.3.1), and then provide a more analytical discussion of them (5.3.2).

5.3.1 Instances of Central Intervention

As discussed in Chapter 2, the *Tenth and Eleventh Five Year Plans for the Coal Industry* (2001, 2007) as well as the 2005 State Council *Opinion on Promoting the Healthy Development of the Coal Industry* all contained language signaling a clear preference for the coal industry to be consolidated under large state-owned firms. Even more forthright was a 2006 State Council *Opinion* which stipulated that "absolute state control" was to be retained over "lifeline industries" touching on national or economic security (State Council 2006a). While that document failed to specify *which* industries were "lifeline" ones, in an interview accompanying the document, SASAC Director Li Rongrong said that seven industries fell into this category, including coal (Xinhua 2006a). The *Eleventh* (and in 2012, the *Twelfth*) *Five Year Plan* took up this phraseology, and pointedly defined coal as a "lifeline industry" – a term that had not yet been used in the *Tenth Plan*, and whose appearance was a clear nod to the 2006 *Opinion*. In media interviews

and op-eds, senior central-level officials also repeatedly voiced support for increasing state control over the coal industry, especially via direct ownership.

The first intervention known to me that was specific to Shanxi came in February 2008 – i.e., about one month *after* Xia Zhengui had started discussions with SOEs about nationalizing Linfen’s coal mines, meaning *after* the Shanxi government had at least decided to explore this policy option. According to a Shanxi scholar, in February 2008, the Center, impressed by the coal SOEs’ performance during the late-January/early February Snow Disaster of that year, informally called on Shanxi to strengthen state control over the coal industry. However, the scholar emphasized that this communication was *not* a *command* instructing the province to take *specific* actions, but a case of communicating the Center’s “spirit” (精神), or general strategic guidance (Interview 83).³⁵

The next Shanxi-specific intervention came on 15 April 2008, when Linfen formally announced nationalization. An official from the State Agency for Work Safety – speaking, it appears, for the Agency – expressed “complete support” for Linfen’s “reform measures” (充分肯定了临汾的改革措施) (*China Economic Weekly* 2008a). The Center also provided material support for Shanxi’s September 2008 decision on nationalization, such as tax breaks for SOEs that consolidated coal mines (Shanxi 2008). Finally, there are the various interventions discussed in the narrative above; viz. Xi Jinping’s March 2009 “instruction” to speed up “mergers and restructuring” and reduce mine numbers to 1000; the winter 2009 inspection of Shanxi by the NDRC and subsequent support memo from Standing Committee members; and the January 2010 press conference and declarations of support from top NDRC and NEA officials. In 2012, the *Twelfth Five Year Plan* would exhort provinces to “draw lessons” from Shanxi and Henan’s experience with consolidating their coal industries under large enterprises.

Yet there were also countervailing signals (cf. Chapter 2). In 2005, the State Council *Opinion* known as the “36 Articles” stipulated that “qualified” private and state enterprises were to receive equal treatment in the coal industry. The exclusion of Li Rongrong’s list of seven industries from both the 2006 *Opinion* and the *People’s Daily* version of the interview with Li were strong hints that not all influential groups at the Center saw SOE control of “lifeline” industries as desirable or necessary. In May and October 2010 further State Council *Opinions* were published that contained language which, while vague, could be interpreted as asserting a space for continued private ownership in coal and oblique criticism of Shanxi and Henan. That only five of the Standing Committee’s nine members signed the memo supporting Shanxi suggests disagreements among the highest leaders, and indeed in 2012 the joint World Bank–State Council Development Research Center *China 2030* report written under the auspices of Li Keqiang questioned the rationale for state ownership of several “lifeline industries”,

³⁵The scholar claimed that he had been told this directly by a senior member of the Shanxi government. The individual is well-connected in Shanxi policy making circles.

including coal. When Wen Jiabao toured Shanxi in summer 2009, he refrained from making any public comment about the coal nationalizations then sweeping the province (State Council Office 2009).

5.3.2 Analysis

The interventions listed above show several patterns. Firstly, as was discussed in Chapter 2, while influential constituencies at the Center and in the top leadership strongly supported nationalization of the coal industry in general and in Shanxi in particular, there was no policy consensus on this, resulting in equally authoritative but subtly contradictory documents.

Secondly, the statements of support for Shanxi from the highest level of the party-state – the Standing Committee – were never made public and appear not even to have been circulated very widely within the state’s internal channels. For instance, the official report on Xi’s visit to the Shanxi NPC delegation in 2009 made no mention of his comments on the coal industry (Xinhua 2009b). While (some) State Council documents called for increasing state ownership and control of coal *in general*, none expressed *direct and specific* support or instructions for nationalization *in Shanxi*. The only explicit public support *specifically for Shanxi* came from ministry-level agencies (NDRC, SAWS), which have the same bureaucratic standing as a province and rank below the State Council, let alone the Politburo or Standing Committee.

Thirdly, most of these interventions were retrospective more than prospective – extending support to actions that had *already begun* to be taken on the ground, rather than preceding these actions – or were vague with regard to what exactly they demanded or encouraged. The February 2008 dissemination of “spirit” encouraging state control came after Linfen had already begun organizing nationalization; the winter 2009 inspection and support memo and the subsequent NDRC press conference all followed and retrospectively endorsed Shanxi’s actions. The 2006 *Opinion*, Li Rongrong’s interview, and the 2001 and 2007 *Five-Year Plans* and the 2005 *Opinion on Promoting the Healthy Development of the Coal Industry* did precede Shanxi’s nationalization, but they did so by between one and seven years. In other words, it is hard to draw very direct causal connections between them and Shanxi’s ultimate nationalization of the industry, not least since they were addressed to the other coal provinces as much as to Shanxi. (It is worth noting that in other “lifeline” industries from Li’s list with private participation, like aviation and electric power, the interview and the 2006 *Opinion* also appears to have had no direct impact.³⁶) Moreover, none of these documents – nor, apparently, the

³⁶In the 2009 and 2010 several private airlines – their balance sheets ravaged by the Financial Crisis – were taken over by state carriers; sometimes in murky circumstances (Eaton 2013). The mid-2000s also saw several private power companies forced under the umbrella of state companies (Cunningham 2009; cf. Lin and Purra 2011). However, the 2006 State Council document (and Li’s personal intervention) appear to have had no direct influence on this, and indeed none of the cited authors mention it.

February 2008 “spirit” – contained *specific* operational instructions for how to increase or establish greater state control and ownership in coal (or other “lifeline” industries), let alone a timeline by when this was to be accomplished.

Xi Jinping’s March 2009 intervention *did* precede Shanxi’s resumption of nationalization under Wang Jun – but it post-dated Meng Xuenong’s initial announcement of nationalization in September 2008. Moreover, it may have constituted slightly less than meets the eye. Note that the source (Shang 2010) does *not* quote Xi as making any comments that explicitly refer to *nationalization*, but speaking only about “mergers and restructuring” (兼并重组). Now, “mergers and restructuring” was the official term that Shanxi had adopted in 2008 for the policies adopted that year that *de facto* amounted to nationalization. In other words, at least in Shanxi’s usage, the term was, in effect, code for nationalization. For instance, Documents 23 and 10, which launched and relaunched nationalization, were entitled, respectively, “Implementing Opinion on” and “Notice Regarding Some Problems to do with Speeding Up and Pushing Forward *Mergers and Restructuring* of Coal-Mine Enterprises” (my emphasis). Thus, no one should have been under any illusions about what was being communicated. And yet, in its reported form the “instruction” contains no detail about how “restructuring” was to be done (e.g. which enterprises were to act as consolidators). In other words, Xi was *not*, it appears, unequivocally committing himself (or the wider central leadership) to personally backing nationalization: if necessary, “mergers and restructuring” could mean many things. Indeed, later, non-nationalizing provinces too would claim to be undertaking “mergers and restructuring” in their coal industries.

The point is *not* that these various interventions – and Xi’s in particular – did not extend real support to Shanxi’s leaders for nationalization or put real pressure on them to get the problem of chaotic and accident-prone mining by small-scale private enterprises under control. Rather, the point is that support was extended in informal and imprecise ways, that left ultimate ownership of the policy – and thus responsibility for concrete decisions – with Shanxi.

Indeed, the level of critical media coverage that Shanxi’s actions encountered and specifically the role played by the Zhejiang Investment Promotion Association – an entity operating under the auspices of the Zhejiang provincial administration – in galvanizing resistance suggests that even within the state’s internal channels no very authoritative statement in support of Shanxi’s actions was being circulated, at least prior to winter 2009. It is hard to image that the Association would have dared to act in the ways it did, had a majority of Standing Committee members made their personal support for Shanxi’s coal nationalization clear. Nor would the Zhejiang authorities likely have permitted the Association to do so. Indeed, after the public endorsement of Shanxi’s policy by the NDRC and NEA in 2010, the Association seems to have wound down its protests.

In sum, the central interventions chronicled above look less like the transmission of clear-cut orders mandating specific policy choices than retrospective endorsements for

policy actions already taken, and broad general statements in favor of increasing state-ownership in coal-mining and reducing mine numbers that stopped short, however, of unequivocally instructing Shanxi to take specific policy actions – or of definitively committing the top leadership to support Shanxi.

This interpretation is supported by the evidence from interviews and media reports. Interviewees familiar with China's policy-making process emphasized that it was rare for the Center to stray *beyond* setting broad strategic objectives and priorities (e.g., reduce accidents, increase state share and industry concentration) and give provinces detailed orders about what to do. While provinces would of course communicate closely with the Center and assure themselves that the Center basically supported their actions, concrete policy decisions about how to achieve the centrally-set strategic objectives would be taken at the provincial level. Thus, these interviewees believed that the decision to nationalize Shanxi's coal industry was, ultimately, Shanxi's; taken in response to the pressing problems Shanxi confronted in its coal industry (especially the continued string of large accidents) (Interviews 30, 48, 50, 55, 61, 71).³⁷ Interviewees with greater personal familiarity with Shanxi's policy and coal industry similarly consistently claimed that the key decisions were taken by Shanxi, and were not simply orders from the Center (Interviews 12, 33, 38, 69, 83, 85).³⁸

This is also the implication of the language used in media reports and by the Zhejiang Investment Promotion Association's spokespeople. Very consistently, these all spoke of coal-mine nationalization as the policy and decision of the Shanxi government. Censorship and strategic language usage cannot be precluded. *Conceivably*, propaganda authorities might have mandated that the media describe the policy as Shanxi's in order to deflect criticism from the Center, and for the Association it was obviously safer to accuse Shanxi of constitutional violations than to accuse the Center thereof. However, had the key decisions in fact been taken at the Center and Shanxi's nationalization amounted to little more than the execution of a command, I would have expected to come across at least some information pointing to this in the press coverage.

On balance, it thus seems most likely that the decision to nationalize most of Shanxi's coal industry was taken by Shanxi's leadership. Yet this decision was taken in a context shaped in crucial respects by the Center, and dependent on central support: it was the Center which had imposed unprecedentedly harsh sanctions on Shanxi officials over the 2007 Hongdong and 2008 Kuiba accidents, and it was also the Center (or at least the

³⁷Senior energy economist from the Chinese Academy of Social Sciences (30), senior manager [副厅级] from a major SOE (48), former editor at a major party newspaper (50), official from the NDRC energy bureaucracy (55), senior official [副部级] from the central tax administration (61), senior engineer at a Shaanxi coal-industry research institute (71).

³⁸Senior researcher from the NDRC Energy Research Institute (12), scholar close to the Shanxi Development and Reform Commission (33), manager from a Shanxi coal SOE (38), senior [处级] municipal official in a coal-mining province who in the recent past had held work-safety responsibilities (69), Shanxi scholar with close connections to Shanxi policy-making circles who studied Shanxi's coal consolidation (83), former manager at a Shanxi coal and heavy-industry consultancy (85).

dominant groups at the Center) which had communicated repeatedly that increasing state control of coal mining was a desired objective. When nationalization ran into intense resistance, the central support for the Shanxi leadership appears to have been crucial for overcoming that resistance and enabling nationalization to be ultimately pushed through successfully. In short, while Center and province contributed to this policy in different ways, its success ultimately required both.

This finding is in line with Sebastian Heilmann's conclusions about the process of policy experimentation in China.³⁹ Studying the reform experience in several distinct domains of economic policy, Heilmann (2008a: pp. 9–10) finds that while policy experiments are mostly prompted by local (municipal or provincial) policy makers “[seeking] to tackle pressing problems … and … pursue personal career … incentives”, they generally depend on (often informal) encouragement and protection from senior leaders, what Heilmann calls “policy hedging”, since “unhedged individual initiative can be risky careerwise or simply futile in China’s polity.”

5.4 The Role of Accidents in Shanxi’s Coal Industry Nationalization

Central state officials responsible for coal and energy policy viewed the private coal mines as creating a number of problems besides accidents; viz. destruction of coal reserves through inefficient and wasteful mining practices, environmental pollution, and (mainly in the 1990s) unstable coal markets marked by “excessive” competition (cf. Chapter 2). They also regarded increasing state control over energy supplies as a good in itself. Provincial officials shared these concerns to some extent, especially those over environmental pollution and inefficient mining practices (Interviews 33, 35⁴⁰; Huang 2011). Having large state corporations take over most of the private mines thus offered a solution to multiple problem. However, there are strong reasons for viewing *accidents* as the fundamental driver of this policy decision. While the other issues were certainly of concern to officials, including at the provincial level, it is unlikely that such drastic action would have been taken, had it not been for the accident crisis. The evidence for this is as follows.

Firstly, there is the *timing and sequencing* of policy decisions. As we have seen, Shanxi began exploring nationalization in the direct aftermath of what was up to that point the largest mining accident that the province had suffered since 2000 (the 2007 Hongdong accident) and only after this and the foregoing series of accidents had demonstrated that the measures hitherto adopted to improve mining safety (increased regulation, local consolidation, granting of clearer property rights to mines) had failed to put an

³⁹While Shanxi’s mine nationalization (“mergers and restructuring”) was never, to my knowledge, officially declared a policy “experiment” (试点), this is precisely what it was: a bold attempt to solve a pressing problem through new and unorthodox means.

⁴⁰Scholar close to the Shanxi Development and Reform Commission (33); scholars from the Shanxi Academy of Social Sciences.

end to large accidents. Moreover, the subsequent Kuiba and Tunlan accidents generated crucial further momentum for nationalization.

Secondly, there is the *policy content*. In particular Linfen's consolidation policies make the link to accidents and the disciplinary sanctions they could generate very clear. Indeed, Linfen's stipulation that only firms under independent safety assessment would be permitted to acquire mines without further conditions and that the city government would not be responsible for the safety of mines after acquisition is only comprehensible in this context.

Thirdly, there is the evidence from *disciplinary sanctions*. As shown in Chapter 3, particularly large numbers of Shanxi officials, including senior officials, were disciplined over mining accidents, sometimes severely so, something explained by the particular political dynamics unleashed by large, intensely covered accidents. As Linfen shows, the threat that disciplinary sanctions could pose to official careers provided a clear motive for nationalization, something emphasized also by several interviewees (see below) and by media commentators (e.g. *China Economic Weekly* 2008b, *Caixin* 2012). "Protecting cadres from being held accountable for coalmine accidents" (保护了干部, 让干部远离矿难问责) was also listed as one of the objectives of nationalization in a Shanxi Coalmine Safety Inspectorate Powerpoint presentation, besides protecting the people from accidents, safeguarding coal reserves, and reducing pollution (Huang 2011). By contrast, I am unaware of a single case of a provincial, municipal or even county leader being disciplined over coal mining-related pollution or the destruction of coal reserves. This is despite the fact that several of Shanxi's major cities, including Linfen and Datong, ranked among the world's (!) most polluted cities.

Fourthly, *comments from industry analysts* quoted in the press as well as my own interviewees treated accidents as the key causal factor prompting nationalization. For instance, the Central Party School professor and mining-safety expert Zhou Hui (周慧) told the *21st Century Business Herald* that "accidents are the most important factor driving forward coal-industry consolidation in Shanxi" (矿难是推动山西煤炭资源整合最为主要的因素) (21 CBH 2008a), and Li Jinmin (李劲民), the director (主任) of the Shanxi government's Development Research Center (山西政府发展研究中心), told *Caixin* that "every [Shanxi] administration had undertaken reforms [to resolve the coalmine safety crisis]; all [unsuccessfully] sought to find the solution. Resource reorganization [i.e., nationalization] had not been tried yet, thus there was no alternative but to [try it]." (每一届政府都在搞改革, 都在寻找突破口, 不进行资源重组, 已经没有别的办法了) (*Caixin* 2012). *Caijing* (2009) quoted similar remarks from the CITIC Securities (中信证券) analyst Wang Ye (王野), and Zhao and Chen (2013), too, treat accidents as the key factor motivating Shanxi's leaders to carry out nationalization.

My own interviewees said much the same. For instance, a senior researcher from the NDRC's Energy Research Institute told me that accidents were the key reason for Shanxi's radical restructuring and nationalization of the coal mines. While destruction

of coal reserves and pollution were major concerns, especially for Beijing policy makers, and industry consolidation was seen as a solution to these problems, it was the continuous eruption of major accidents and the public attention they generated that placed Shanxi's leaders under the political pressure to take action (Interview 12). Much the same was said by many other interviewees – again and again, they returned to mining accidents as the key factor causing Shanxi policy makers to nationalize the industry (Interviews 3, 15, 8, 10, 27, 30, 33, 37, 38, 39, 70, 71, 72, 73, 86, 87).⁴¹

5.5 Coal Industry Restructuring in other Case-Study Provinces (I): Nationalization in Henan

Among the other case-study provinces, only Henan nationalized its coal industry. Why? Again, accidents and media coverage appear to have played a central role. Figure 5.3 tracks the monthly number of articles and multimedia products that mention mining accidents in Henan, Guizhou, Inner Mongolia and Shaanxi that were linked to online by the Sina.com portal between January 2007 to December 2013.⁴² Table 5.2 lists the number of coalmining accidents with 20 or more fatalities that each province suffered in these years. As is easy to see, Henan both suffered significantly more large and very large accidents than the other provinces, and as a result attracted substantially more media coverage.

The inability to peer into the minds of provincial decision makers makes it impossible to obtain final certainty that it really was the accidents, and the media coverage they sparked, that determined Henan's leaders to push through nationalization. However, as we will see below, the available evidence does strongly encourage this interpretation: Just as in Shanxi, Henan began exploring nationalization seriously in the aftermath of a very large accident, and the continued occurrence of large accidents thereafter seems to have been important for encouraging provincial leaders to face down resistance to their plans. Likewise, we shall in Section 5.6 that there is good evidence that Shaanxi,

⁴¹Chinese journalists specialized on energy and environmental topics A (3, 15) and B (9); Shaanxi correspondent of a major national paper (70); Chinese economists and energy researchers A (8), B (10), C (30), D (72), E (73); scholar close to the Shanxi Development and Reform Commission (33); current and former managers from three Shanxi coal SOEs A (37), B (38), C (86), D (87); senior engineer at a Shaanxi coal-research institute (71) official from a municipal coal-industry bureau in Shanxi (39); heavy industries analyst from a major Chinese investment bank (27).

⁴²The search strings used were “[Province]” AND “Mining Accident” (山西AND矿难) and “[Province]” AND “Coal Mine” AND “Accident” AND NOT “Mining Accident” (山西AND 煤矿AND事故AND NOT矿难).

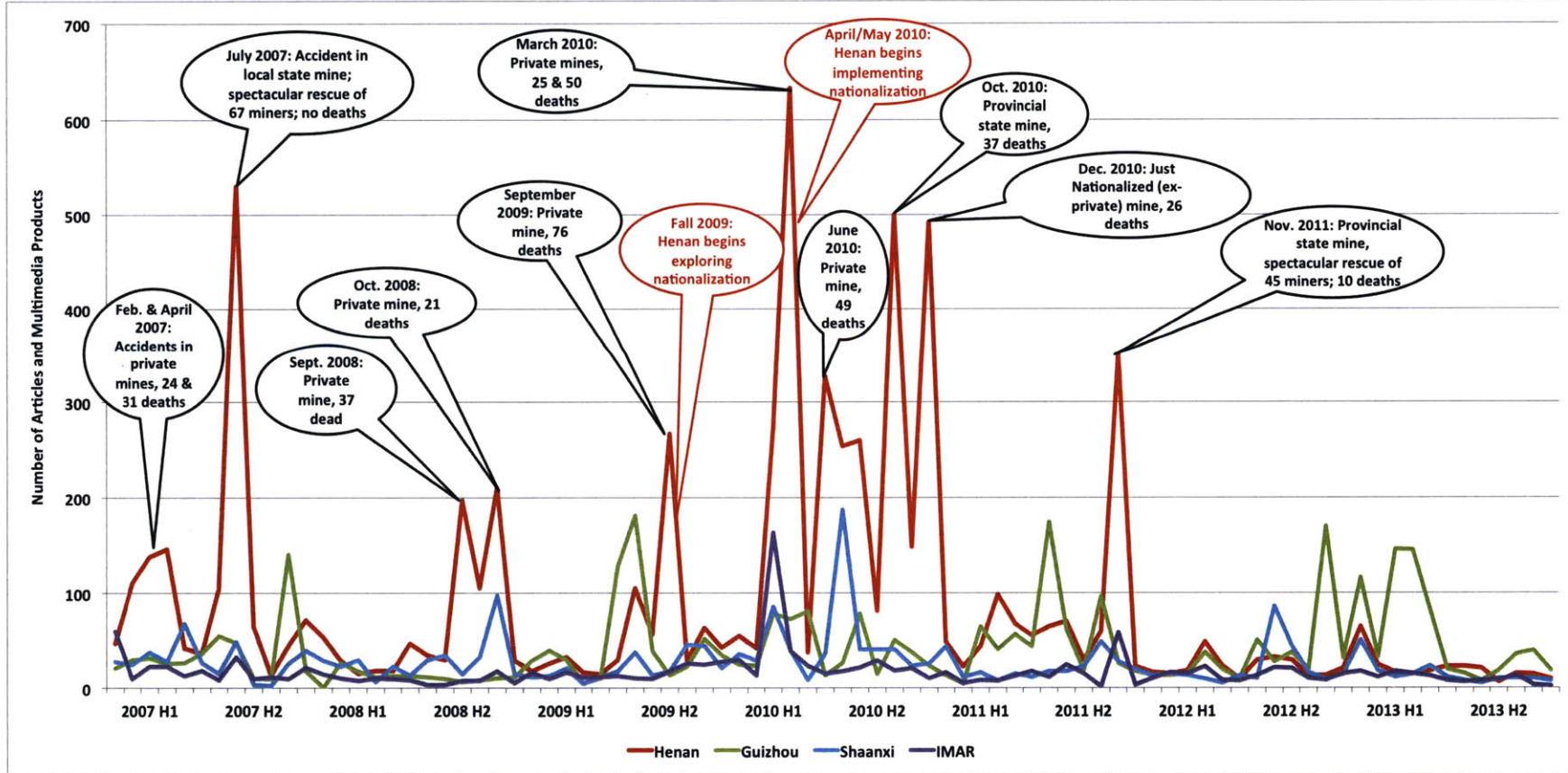


Figure 5.3: Coverage of Mining Accidents in Henan, Shaanxi, Guizhou, and Inner Mongolia, 2007 – 2013
Source: Sina.com

Province	Acc. with 20+ Fatalities	Of which: 30+ Fatal.	Of which: 50+ Fatal.
Henan	10	6	4
Guizhou	5	1	0
Shaanxi	2	0	0
Inner Mongolia	1	0	0

Table 5.2: Large Coalmining Accidents in Henan, Guizhou, Shaanxi, and Inner Mongolia, 2007 - 2013

Sources: Safehoo.com, own data compiled from media reports

Guizhou and Inner Mongolia's failure to nationalize was related to the absence, in these provinces, of a safety/media crisis comparable to Shanxi and Henan's.

5.5.1 Policy Evolution and Resistance

On 8 September 2009 an underground gas explosion at a private mine in Pingdingshan city (平顶山), Henan, killed 76 mine workers. This was the second-largest mining accident Henan had suffered since 1998, and it seems to have prompted Henan's leaders to explore nationalization as a solution. Official delegations were repeatedly sent to Shanxi to study that province's experience with renationalization. By late October initial plans for restructuring Henan's industry had been drafted and industry participants increasingly expected Henan to implement nationalization along the lines of what had by now become known as the "Shanxi Model" (山西模式) (*Caijing* 2010d, *21 CBH* 2010e, *Economy & Nation Weekly* 2010b).

However, no official policy announcement actually followed until February 2010, and implementation only began in April or even May 2010 (*China Economy and Informatization* 2011, *Time Weekly* 2010). Instead, policy became ensnared in fierce disputes about what form industry restructuring was to take, with draft plans undergoing multiple revisions and key words being repeatedly added and removed (*Caijing* 2010d, *EO* 2010a, *China Economy and Informatization* 2010). While the initial draft reportedly advocated consolidating the industry under the large provincial SOEs (i.e., copying the Shanxi Model), county and municipal governments pressed for consolidating the industry on a local basis, under local companies. Their counter proposals envisioned creating new, regionally-based companies owned by counties and municipalities or by privates,

with each mining region (区域) to be consolidated by one or several such local firms (*Caijing* 2010d, *EO* 2010a). In other words, the local governments wanted to continue with the policy of “local consolidation” that Henan, like the other case-study provinces, had adopted in the mid-2000s. Just as in Shanxi, economic interests were central to this dispute, as local officials feared that mine consolidation by the large provincial SOEs would reduce fiscal revenue from taxes and, especially, fees, “donations” and other informal payments, and eliminate their scope for (illicit) personal income through bribes or stockholding in mines (*Caijing* 2010d, *China Times* 2010, *EO* 2010a, 2010b, *Economy & Nation Weekly* 2010b).

At the end of February 2010, the provincial government finally published a document setting out the restructuring to be implemented (“Document 32”). Reportedly, this adhered closely to the original draft policy proposals prepared in October 2009 (*EO* 2010a). For certain, though, Document 32’s content and implementation largely copied Shanxi’s policy and practice; it thus represented a broad defeat for the local governments.

All mines with production capacity between 150,000 and 300,000 tons would have to let themselves be acquired by “large-scale coal companies” (大型煤炭企业), with the acquirer taking at least 51% of the stock and assuming full control over the acquired mine’s operations as well as responsibility for safety (Henan 2010). The policy objective was defined as “creating an industry structure in which mines are mainly operated by large-scale coal companies, [thus] raising the level of safety and the comprehensive development level of the coal industry” (Henan 2010).

While Document 32 contained a brief reference to mergers between privates, it stipulated that the “provincial backbone coal enterprises” (省骨干煤炭企业) were to act as the main consolidators. Although it refrained from directly identifying which enterprises these “backbone companies” were, a provincial official admitted in a newspaper interview that the phrase indeed referred exclusively to the six large provincially-owned state coal companies (*Economy & Nation Weekly* 2010b). Moreover, like Shanxi’s Document 23, Henan’s Document 32, too, divided the province’s major mining areas up among the six provincially-owned state companies. Companies *other* than the provincially-owned Big Six were only permitted to acquire mines if they (the company) already had a coal-production capacity above 1 million tons per year, and even then this right was restricted to acquiring mines in the immediate vicinity of the company’s existing production operations (Henan 2010). Only the Big Six would be permitted to take over mines province-wide. The provincially-owned key state coal companies thus came to control most of Henan’s coal industry (cf. Chapter 4). The total number of coal firms was whittled down from 530 in 2008 to just 30 in 2011 (SAWS 2012).

The publication of Document 32 did not end resistance. In mid-March a prominent mine owner in Xinmi city (新密市), one of Henan’s main coal areas, told a journalist that so far nothing had been done locally about carrying out Document 32 (*Economy &*

Nation 2010a). Implementation proper appears only to have begun in April and May. As late as 12 May, Vice-Governor Shi Jichun (史济春) felt obliged to publicly criticize a municipality for “passivity” (消极怠工) in implementing “mergers and restructuring” (as the nationalization campaign was called). He also castigated the leaders of two counties for maintaining excessively close relations with local coal bosses and “seeking to thwart restructuring by all means possible” (千方百计阻挠重组) (*EO* 2010c). Provincial-government cadres and executives from the SOEs also complained to journalists about local officials’ “negative attitude” (消极态度) to industry restructuring (e.g. *China Times* 2010). The Henan Provincial Government Department for Industry and Informatization (河南省工业和信息化厅, HPGDII) even admitted in an official report to the NDRC that “interference and obstruction” in the “mergers and restructuring” campaign had been substantial (干扰阻力大) (HPGDII 2011).

The intensity of local-government resistance is also indicated by the fact that, according to the *Henan Daily*, the provincial leadership felt obliged to order the Party Discipline Inspection Committee to supervise the “merger and restructuring” work “in order to guarantee its smooth completion”, with cadres who “failed to carry out orders” threatened with investigation (对在兼并重组期间有令不行的...要依法查处). The Provincial Party Organization Bureau (the Party’s personnel management office) also made “the performance and work results” of leading cadres an “important component of cadre evaluations”, with those whose work was lax to be “dealt with promptly” (将把兼并重组中领导干部的表现及工作业绩作为干部考核的重要内容，对工作不力的单位领导，及时提出处理意见) (*Henan Daily* 2010).

Nor were Henan’s mine owners any more enthusiastic about being nationalized than Shanxi’s had been. Coal prices in 2010 were high (cf. Figure 4.12 in Chapter 4) and like in Shanxi, the SOE monopsonies that Henan created by dividing the mining areas up among the SOEs meant that the privates had little bargaining power and were forced to accept whatever prices the SOEs offered (*21 CBH* 2010e). Media reports thus consistently portray the owners as very unhappy about the restructuring, and make it clear that it was forced on them (*Caijing* 2010d, *Time Weekly* 2010, *Economy & Nation Weekly* 2010b). While there was no prominent, organized protest activity (to my knowledge) of the kind organized by the Zhejiang Investment Promotion Association, both Vice-Governor Shi and the Deputy Head of the Henan Industry and Informatization Department, Chen Dangyi (陈党义), accused coal bosses of trying to evade nationalization and obstruct and drag out the takeover process, for instance by refusing to furnish the government and SOEs with relevant documentation and being slow to hand over operational control of their mines (*EO* 2010c, *Orient Today* 2010).

5.5.2 The Role of Accidents in Henan’s Coal Industry Nationalization

The source materials for Henan are unfortunately less rich than those for Shanxi. However, those materials that I could obtain indicate that accidents very likely did play a

key role in prompting and driving forward nationalization in Henan. Above, we saw that the decision in Fall 2009 to explore nationalization was prompted by a major accident. The ultimate publication of Document 32 on 26 February 2010 cannot be readily linked to any particular accident and the publication of Document 32 did not end resistance to nationalization. However, in spring and early summer Henan suffered three major accidents in quick succession: on 15 March, an underground electrical fire led to the death of 25 workers, on 31 March a gas explosion killed 50, and on 21 June a further explosion killed 49. All three accidents occurred in private mines, and all three triggered outpourings of media coverage (cf. Figure 5.3).

It appears that these accidents spurred on nationalization and strengthened the Henanese leadership's determination to face down resistance and obstruction from local governments and coal bosses. Thus in June and July 2010, officials from the Henan Development and Reform Commission, the Henan Coal Industry Bureau, and the Henan Industry and Informatization Department as well as SOE executives separately told journalists that the large accidents of the spring had "strengthened the determination of Henan's leadership" and "sped up the pace" of industry restructuring (坚定河南省煤改的决心，并加速推动煤改进程) (*China Times* 2010, *China Energy News* 2010a, *Time Weekly* 2010; cf. also *China Economy and Informatization* 2011. The quote is from *China Times*). Specifically, while Document 32 had originally allotted an entire year (until March 2011) for the mergers and restructuring to be completed, on 12 May the provincial government decreed that basic framework agreements between *all* the mines scheduled for acquisition and their acquirers would have to be signed already by end-June 2010 (*ibid.*).

More broadly, officials from the Henan branch of the State Agency for Coal Mine Safety (SACMS, a subunit of the State Agency for Work Safety) went on the record stating that with respect to accidents, the private mines were the "main disaster zone" (重灾区) in Henan due to a lethal combination of insufficient investment, "backward" (落后) management and equipment, and persistently lax supervision by county and municipal governments (地方政府监管不力) (*China Energy News* 2010a). According to one SACMS official, "if [the problem] of safety in the small mines is addressed, then the entire province's coal-mine safety situation will improve" (搞好小煤矿的安全生产，全省煤矿安全生产形势就能好转) (*China Industrial Economy News* 2010). Government officials stressed that improving safety was the central motive for the industry restructuring (e.g. *Time Weekly* 2010, *EO* 2010c), and Document 32 also proclaimed this to be the main objective.

5.5.3 The Role of the Center in Henan's Coal Industry Nationalization

It is hard to know for certain what role the Center played in the industry restructuring in Henan. Several scholars have noted that bandwagoning – whereby radical or controversial policies are first pioneered by one or a few provinces that have particularly

strong reasons for experimenting with these policies, and are only adopted by others once the Center has clearly signaled its support – is a fairly common phenomenon in Chinese politics (e.g. Chung 2000). That Henan’s Document 32 was published after the joint NDRC-NEA-Shanxi press conference (at which the NEA and NDRC endorsed the Shanxi Model and called for spreading it to the entire country) had taken place and largely copied the “Shanxi Model” would seem to fit arguments about the importance of bandwagoning. Indeed, several interviewees believed that the relative success of Shanxi’s industry restructuring put other provinces under pressure undertake similar industry reforms and this claim was also occasionally made in the press.

However, beyond these relatively vague claims no more specific indications of central interventions in Henan’s policy debate over nationalization could be found. Arguably as significant as the fact that Document 32 came after the press conference is that it was only released almost two months afterwards: the press conference was on January 5, Document 32 was published on 26 February. Moreover, as we have seen, local government resistance to nationalization continued thereafter. Evidently, the statements from NDRC and NEA leaders at the press conference by itself did not end Henan’s policy debates.

That is not to say that they were irrelevant. Henan was operating in a context where the Center had made it clear that it wanted to see accidents brought under control and coal mining consolidated, and influential groups at the Center had signaled that they favored nationalization. At a minimum, the NDRC/NEA press conference restated this, thus providing a supportive political context for nationalization in Henan. Yet subsequent developments also indicate that by themselves, even proclamations by the State Council might have only limited impact on provincial practice.

On 7 May 2010 the State Council published the *Opinion on Encouraging and Guiding the Healthy Development of Private Investment* (“New 36 Articles”). This document sought to restate the rights of private capital to enter various “monopoly” industries that had first been proclaimed in the original “36 Articles” from 2005, and more broadly sought to signal continued central support for the private sector (Naughton 2011). Specifically with regard to mining, the “New 36 Articles” called for “supporting the comprehensive opening of the market for mining rights to private capital” (坚持矿业权市场全面向民间资本开放) (State Council 2010a). Because this phrase avoided specifying whether “comprehensive opening” only referred to private minority ownership or also included controlling ownership, it was somewhat more ambiguous than meets the eye. These ambiguities provided space for interpretation and thus for maneuver and policy choice, but the document also signaled, at a minimum, that some groups at the Center with enough clout to get State Council documents written so as to reflect their views, too, *did not* favor coal-industry nationalization. Yet this made no impact on Henan – on the contrary, far from encouraging Henan to at least pause nationalization and await clearer rulings from the Center, Henan sped up the pace of nationalization: On 12 May, five days after the publication of the “New 36 Articles”, the province issued the

above-noted missive instructing the localities to ensure that all mines signed framework merger and acquisition agreements by the end of June.

5.6 Coal Industry Restructuring in Other Case-Study Provinces (II): Private-Sector Preservation in Shaanxi, Guizhou, and Inner Mon- golia

In 2010 and 2011 Shaanxi, Inner Mongolia and Guizhou also launched new campaigns to restructure and consolidate their coal industries. There are some differences between the policies each of these provinces adopted, but more important is what they share in common, and what distinguishes them from Shanxi and Henan: while Shaanxi, Guizhou and Inner Mongolia also saw individual cases of private mines being acquired by state companies, overall, the restructuring policies adopted by these provinces were much more solicitous of local political and business interests. Concretely, none enforced nationalization and thus in each of these provinces large private coal industries were preserved, at least initially. (Especially in Inner Mongolia and northern Shaanxi, the collapse of the coal price does seem to have put privates under tremendous pressure and from 2013 onwards appears to have caused many to exit the industry.) The individual buy-outs of private owners by state firms that did take place during these provinces' consolidation campaigns seem to have been mostly cases of privates selling to the highest among several bidders, i.e. voluntarily choosing acquisition by a state firm because it offered superior terms. Instead, the provinces largely continued the policies of "local consolidation" discussed in Chapter 4; viz., encouraging private mines to merge among each other.

5.6.1 Shaanxi

5.6.1.1 Policy Analysis

Shaanxi seems to have begun planning a renewed push to consolidate coal mining in the province in March or April 2010 (*China Energy News* 2010b). In September targets were announced: By July 2011, the number of coal-mining firms was to be cut to 120 from 522 at present, and by 2013 the number of mines (矿井) was to be reduced to 450 from about 600 at present, with average size raised to 1 million tons production capacity and 90% having fully mechanized mining processes (Shaanxi 2010). Counties and municipalities were ordered to prepare consolidation and restructuring plans for their locality, to be submitted to the province by December (*Chinese Business View* 2010). Implementation proper began in early 2011 and seems to have been completed by the end of June that year (*China Business* 2011, *Time Weekly* 2014).

The timing is significant for several reasons. Firstly, that Shaanxi began planning a new restructuring campaign in spring 2010 indicates that Shanxi's successful implementation of coal-mine "mergers and restructuring" and Henan's initiation thereof – plus the NDRC's and NEA's endorsement of their actions – placed the other major coal provinces under pressure to carry out further consolidation of their own. As mentioned in Chapter 2, in October 2010 the State Council published an *Opinion* calling for further coal-industry consolidation⁴³ and at the end of August a State Council meeting was held to discuss that *Opinion*'s basic content. This reportedly pushed Shaanxi to step up its pace of preparations (*Chinese Business View* 2011a). Indeed, Shaanxi's September announcement of consolidation targets fits this claim, coming as it did one month after the State Council meeting and shortly before the release of the October *Opinion*. As we will see, Guizhou and Inner Mongolia were not quite as quick, but they too had announced new rounds of industry consolidation by spring 2011.

Yet the further statements from Shaanxi officials as well as the actual form that industry restructuring in Shaanxi eventually took indicates that while the major coal provinces, at least, were under pressure to implement *some* form of consolidation or, as it was now commonly called, "mergers and restructuring" in their coal industries, they also had very broad scope to decide about how to do this, especially if they promised some impressive headline reductions in the number of operating mines and firms and if their coal industries produced few large, attention-grabbing mining accidents. As early as mid- or late April 2010, the Shaanxi Vice-Governor Jing Junhai (景俊海) stated publicly that

The situation in Shaanxi is different from that in Shanxi. Although [our] basic line of thought (思路) is similar, the concrete approach to coal-industry reform (煤改具体的做法) that we will take will be different.

This was widely read as intended to provide assurances to owners of private coal mines that Shaanxi would not follow the examples of Shanxi and Henan, and enforce nationalization (*Chinese Business View* 2010). Local mine owners apparently also received private assurances from the provincial government that Shaanxi would not nationalize the industry.⁴⁴ From early 2010 through to summer 2011 officials from the provincial coal-industry bureau and the provincial coal-mine safety inspectorate in Shaanxi also repeatedly briefed journalists that Shaanxi would not copy Shanxi's "indiscriminate" approach (一刀切). Rather, they argued, Shaanxi's supposedly "special situation" (特殊

⁴³The *Opinion on Speeding Up and Pushing Forward Consolidation and Restructuring among Coal-Mining Enterprises* (关于加快推进煤矿企业兼并重组的若干意见).

⁴⁴This was told to me by the Shaanxi correspondent of a major national newspaper (Interview 70). A private mine-owner from northern Shaanxi also claimed that the local coal bosses were not worried about nationalization because they "knew that [whether to nationalize or not] was decided by the provincial level, and the Shaanxi government had a different attitude [to the Shanxi government]" (Interview 77).

情况; more on which below) required flexible policies attuned to the local particularities of each mining area (因地制宜) (*China Energy News* 2010b, 2011a; *Chinese Business View* 2010; *China Times* 2011, 21 *CBH* 2011d). Provincial officials also pointed out that

Shaanxi has *already* ... achieved one of the best coal-mine safety performances in the country and ... [its safety management] has received high praise from national authorities. (国家有关部门的高度评价) (Zhang et al. 2010; my emphasis).

In other words, the safety performance of coal mining in Shaanxi was already good, thus presumably obviating the need for radical changes.

It is striking that Shaanxi officials were speaking in these terms as early as April 2010 – just months after the NDRC and NEA had praised Shanxi’s approach and in the same weeks as Henan was nationalizing its own coal industry. As discussed in Chapter 2, in May and October 2010 the State Council issued *Opinions* that provided political cover for preserving a private coal sector, and the Shaanxi authorities will have presumably been aware that disagreements existed at the Center about nationalization. However, that Shaanxi officials – and the Vice-Governor in particular – were willing to speak in these terms even before the said State Council *Opinions* were issued, once again indicates that key decisions about the scope and form of coal-mine consolidation and restructuring – and especially about how to treat the private coal-mining sector – were taken at the provincial level, and that the provinces enjoyed real choice in this regard.

As the output data presented in Chapter 4 indicate, the consolidation and restructuring that Shaanxi ultimately implemented in 2011 largely preserved the private coal-mining sector. In 2009, private (township and village) mines had accounted for 37% of total coal output in Shaanxi. In 2011 they made up 52% of output. In 2012 (the last year for which output data are available) most provinces bundled production from local state mines and private (village and township) mines into a single statistical category, that of “local mines” (52% of Shaanxi’s coal output that year). While this category obscures ownership structures, media reports and interviewees very consistently described Shaanxi’s consolidation as having proceeded *without* major changes to ownership structure (*21 CBH* 2015; *Caijing* 2011; *China Business* 2011, 2015; *China Times* 2011, 2012, 2013; *EO* 2011g; *Time Weekly* 2014; *Xi'an Evening Post* 2012; Interviews 70-75, 77, 79, 84⁴⁵). Given the substantial media interest and public debate that nationalization in Shanxi and Henan had evoked, it can be assumed that had nationalization taken

⁴⁵Private coal-mine owner from northern Shaanxi (77); former SOE manager (84); Shaanxi journalists specialized on energy topics, one of whom is from Yulin (74, 79); Shaanxi correspondent of a major national newspaper (70); Shaanxi economists, one of whom is specialized on energy topics and from Yulin (72, 73, 75), chief engineer at a Shaanxi coal-industry research institute (71).

place on a significant scale in Shaanxi, the press would have reported on this.⁴⁶ In other words, while we cannot know what the exact relative share of private and local-state production was that was logged as coal produced by “local mines” in 2012, we can safely assume that most mines that were under private ownership in 2010 (before consolidation) remained so in 2012 (after consolidation).

As we will see below, there were instances of private mines being bought up by SOEs during consolidation, but with the partial exception of the areas around Hancheng and Weinan – indicatively, the most accident-prone areas of Shaanxi – these were rare and seem to have mostly resulted from SOEs offering mine owners better buy-out prices than other privates did. In particular in northern Shaanxi (陕北; Shaanbei, the region around Yulin municipality [榆林]), SOE take-overs seem to have been very rare. This is significant, because by the 2000s the Shaanbei had become Shaanxi’s main coal-mining region and the center of Shaanxi’s heavy industry (conversely, the coal seams in Hancheng and Weinan were already largely exhausted).

This preservation of the private mines was possible because Shaanxi structured its consolidation policy in ways that systematically facilitated this outcome by maximizing the space for flexibility and discretion that municipal and county authorities enjoyed. Indeed, Shaanxi officials described their approach to consolidation as being “bottom-up” (自下而上) and “grassroots-driven”, and contrasted this to the “top-down approach” (自上而下) of Shanxi and Henan (*China Times* 2011, *EO* 2011g).

This was done as follows. Unlike Shanxi and Henan, Shaanxi never published a policy document setting out how – and by implication, how not – consolidation was to proceed. Instead, the province negotiated individual “responsibility contracts” (目标责任书) separately with each municipality that set out agreed consolidation targets for that locality. These contracts and targets were not made public. Crucially, Shaanxi refrained from specifying minimum-scale or other requirements (e.g. mechanization levels) that firms desiring to act as consolidators (兼并主体) would have to meet. Nor did the province pick the firms that were to act as consolidators, and the province also refrained from setting general, province-wide minimum-scale or mechanization requirements that mines would have to meet in order to avoid being closed or consolidated (21 *CBH* 2011d). (Recall that Shanxi and Henan ensured that nationalization would be the outcome of “merging and restructuring” their coal industries by picking SOEs as

⁴⁶It is worth noting that the continued existence of a substantial private – and small-scale! – coal-mining sector in Shaanxi and especially northern Shaanxi (Shaanbei) emerges clearly also from media reports produced in 2013, 2014 and 2015 – several years after consolidation, when any conceivable – hypothetical – incentive or propaganda order to lie or mislead about Shaanxi’s consolidation should have long-since faded away. Indeed, much of the coverage from 2013–2015 (which was concerned with the dramatic fall in coal prices and the resultant collapse of the large informal and at best, semi-legal, credit networks [民间借贷] that had financed much of the private coal industry in Northern Shaanxi and Inner Mongolia) was quite critical of Shaanxi’s 2010/2011 consolidation, noting that many of the later financial troubles could be linked to the earlier consolidation, or showing that much consolidation had been faked, with private mines merging in name but not in reality.

consolidators and defining minimum-scale requirements that consolidators would have to meet that effectively excluded most private mines from acting as consolidators).

Instead, Shaanxi officials told the media that minimum standards, and who consolidated whom, had to be handled flexibly according to the local situation (*Chinese Business View* 2010, 2011b; *China Energy News* 2010b; *EO* 2011g). They also explicitly endorsed the practice of small private mines merging *among each other* – what I call “local consolidation” – rather than being acquired by large outside firms. The only general condition imposed was that after consolidation, firms – not individual mines – would have to have attained a certain minimum scale (3 million tons output capacity in northern Shaanxi; less elsewhere) (21 CBH 2011d, *China Times* 2011, *Chinese Business View* 2011a, 2011b). But this could be achieved by simply adding further, geologically separate mines to the company without physically merging these mines. Combined with willingness on part of the authorities to tolerate mergers between firms that were more nominal than real, this meant that it would be relatively easy for local governments and mine owners to preserve much of the extant private coal industry.

Minimum-scale requirements for mines were probably also set – though never, to my knowledge, made public – and while mines that were smaller than the stipulated scale would in theory have to be shut down *at some point*, it appears that in practice this was treated as an aspiration to be achieved in the future, rather than as a hard condition that would have to be met now. In other words, instead of being shut down, the mines could simply merge (at least nominally) with others or enlarge their own operations – become bigger – in order to meet the scale requirement.⁴⁷

Publicly, this flexibility tended to be justified with reference to the regional variation in Shaanxi’s coal industry, and particularly with the situation in southern Shaanxi (陕南, Shaannan). There the fields are mostly small and scattered, cannot easily be mined by large establishments, and produce mostly low-quality coal, thus further reducing their attractiveness as take-over targets for large firms. They do however provide cheap coal for use by the local population. Officials argued that preserving the small-scale (and mostly private) mines in the Shaannan was essential for supplying the local population with coal and jobs since trucking coal in was not cost-effective, and that instituting “indiscriminate”, province-wide minimum-scale standards would threaten these mines (*Chinese Business View* 2010, 2011b; *China Energy News* 2010b; *EO* 2011g).

There is no reason to doubt that provincial and especially local policy-makers felt little enthusiasm for forcing take-overs or closures onto the Shaannan mines, given the

⁴⁷Shaanxi published lists of mines scheduled for “closure” (关闭) in 2010 and 2011, but in fact the language used in the documents often implied that these mines were to be merged or expanded, instead of being closed (cf. Shaanxi 2011a, 2011b). Of the 30 Shaanxi mines that appear in the 2013 and 2014 National Energy Administration lists of “backward capacity to be eliminated” (淘汰落后产能计划), only 10 are in fact slated for closure; the rest are to be “upgraded” (改造升级) or “merged and restructured” (兼并重组) (cf. National Energy Administration 2013, 2014). As we saw in Chapter 4, substituting consolidation or upgrading and enlargement for closures for small mines was nothing new.

social and economic disturbance this would have been likely to create. But the same policy flexibility – no clear specification of minimum-scale or other requirements, no picking of consolidators by the state – was applied also to northern Shaanxi, where the fields contain very high-quality coals, deposited in shallow and geologically-simple fields that are suitable for large-scale, often open-cast mining. This suggests strongly that while officials may have felt that the Shaannan provided the most convenient case for *justifying* their “flexible” approach to industry consolidation, ultimately, this approach was adopted due to a larger reluctance to enforce unwanted change on local political and business constituencies across the province, and not just in southern Shaanxi. We will return to this point below.

Shaanxi’s coal-industry “mergers and restructuring” thus mainly took the form of private mine owners merging their companies and mines among each other. Most commonly, it seems, mine owners would set up a new Group company and inject their existing mines and firms into this as subsidiaries (*21 CBH* 2011d, *China Business* 2011, *EO* 2011g, *Xi'an Evening News* 2012, *China Times* 2011, Interviews 70, 74, 77, 79⁴⁸). Often, it seems, these “mergers” were nominal more than real. Interviewees repeatedly stressed that in practice Shaanxi authorities had been quite flexible and “soft” (软) about how mergers were achieved. For instance, in Zichang county (子长), Yan’an municipality (延安), the 16 local mining companies set up a new company, the Zichang County Coal Industry Group Company (子长县煤业集团有限责任公司), with each company paying in the same amount of capital (RMB 500,000) and obtaining an equal number of seats on the board. The county government promptly announced that Zichang had thereby transformed the formerly small-scale and technologically-backward mines that made up its industry into efficient, large-scale mines that used mechanized equipment instead of explosives to extract the coal. But in fact the Group was largely a shell, with each of the subsidiary companies continuing to operate independently. No unified management was established. As a result, the effort to merge (physically integrated) and upgrade the Group’s mines quickly bogged down, as it proved impossible to obtain agreements among the owners (*China Times* 2012a). Cases like this were apparently common across the province (*China Times* 2012a, Zijin Net 2013, Interviews 70, 71, 79⁴⁹).

Indeed, far from reducing the amount of private investment, consolidation seems to have actually led to further *inflows* of private capital into coal mining. When they were real, mine mergers and acquisitions as well as upgrading and expansion of mines required large amounts of investment. The large profits that had been earned in coal in the 2000s and the very rapid appreciation of the prices paid for mines and mining rights on the secondary market in turn attracted substantial inflows of private capital – at

⁴⁸Shaanxi correspondent of a major national newspaper (70), Shaanxi journalists specialized on energy topics, one of whom is from Yulin (74, 79), private mine-owner from northern Shaanxi (77).

⁴⁹Shaanxi correspondent of a major national newspaper (70), chief engineer at a Shaanxi coal-industry research institute (71), Shaanxi journalist specialized on energy topics whom is from Yulin (79).

least until the coal market went into an abrupt and precipitous downturn in 2012 – and meant that until about 2013 “coal bosses” in need of money to enlarge their operations or acquire new mines did not lack for financing channels, and loaded up on credit from informal, underground financing houses (民间借贷) that pooled savings from the local population or issued equity to them, a process the government legitimized – arguably even encouraged – under the slogan of “all people become shareholders” (全民入股), in order to spread the mining wealth more broadly locally (*21 CBH* 2013, *Sina Finance* 2014, *EO* 2013b, *China Business* 2015, *China Times* 2013, *Chinese Business View* 2011a, *Xi'an Evening Post* 2012).⁵⁰

This is not to say that there were no cases of SOEs acquiring private mines whatsoever. As one coal boss pointed out, the large SOEs – in particular, those owned by the central government – possessed deep financial reserves and could make very attractive offers for mines (*21 CBH* 2011d). Yet as discussed in Chapter 4, generally the SOEs had only limited interest in acquiring small mines, given the high cost of upgrading and enlarging their facilities. They preferred instead to acquire new, as yet unmined, coal concessions and build large new mines from scratch. This was probably especially the case in northern Shaanxi, as this region still contained large, valuable and unmined coal reserves. Indeed, while northern Shaanxi had by the late 2000s become the province’s main coal-producing region, only a very few case of SOE buy-outs of privates were reported there (*China Business* 2015, *EO* 2011g).

Rather, most takeovers of private mines by large SOEs seem to have occurred in central Shaanxi, in the municipalities of Hancheng (韩城), Weinan (渭南) and Tongchuan (铜川), and some of these were government-orchestrated. In 2011, Datang (大唐集团), a large central government-owned electricity producer, and the Shaanxi Coal and Chemicals Industry Group (陕西煤业化工集团), Shaanxi’s provincially-owned coal SOE, acquired nine of the 22 mines slated for consolidation in Hancheng. In 2012, the provincial government ordered Shaanxi Coal Chemicals to take a further 37 mines in Weinan, Tongchuan and Yan'an into “entrusted management” (托管). Under this structure, the property rights to the entrusted mine would *not* change but remain with the private owner, and the local governments also remained responsible for regulatory oversight. However, actual production as well as decisions over safety and technology would now be managed by Shaanxi Coal Chemicals (Shaanxi 2012). How profits were to be divided up was not specified. Probably, they would either be split between the private and the SOE, or flow entirely to the private – after the SOE had deducted a “management fee” (管理费).

That government-mandated SOE takeovers of this kind seem to have occurred exclusively in central Shaanxi but not in Yulin is striking, since Yulin was the center of the

⁵⁰The collapse of the coal market seems to have turned this into a fiasco. By 2013 many Shaanxi bosses were reportedly struggling with loan repayments, a problem that deepened in the subsequent years (*21 CBH* 2013, *China Business* 2015, *China Times* 2013, *EO* 2013b, *Sina Finance* 2014).

industry while mining in central Shaanxi was in rapid decline. However, it becomes comprehensible when seen from the perspective of safety. The coal deposits in Yulin are shallow, have low gas content and low risk of flooding, and are sometimes even suitable for open-cast mining. Thus, they are relatively safe. The mines in central Shaanxi are gassy, deep underground mines. Hence, they are far more dangerous. Indeed, of the 16 coal-mine accidents known to me with 10 deaths or more that occurred in Shaanxi between 1997 and 2011, only *one* occurred in Yulin. All others occurred in Tongchuan, Hancheng, Weinan and Yan'an, including the worst accident in Shaanxi in this period; a gas explosion in Tongchuan in the autumn of 2004 that killed 166.

While a modest number of obligatory tie-ups between state and private mines thus occurred in central Shaanxi, in northern Shaanxi the few take-overs of private mines by SOEs that did occur seem to have been entirely voluntary. Shaanxi did however to some extent encourage state and private firms in northern Shaanxi to set up new joint ventures – i.e., new projects jointly invested in by state and private firms – both in mining and, especially, in downstream industries (e.g. coal refining, power generation). The provincial authorities appear to have incentivized this by providing such ventures with generous access to new coal reserves, and possibly other concessionary measures (*Xi'an Evening News* 2012, *EO* 2011g).

According to several journalists as well as an interview that the deputy head of the Shaanxi Development and Reform Commission gave to the *21st Century Business Herald*, the logic behind this was as follows. Encouraging joint investment projects between local private and provincial and central-state firms served to “balance interests” between the localities and the SOEs, thus making the locality more supportive of investments by higher-level SOEs, and would help to drive local industrial development and the growth of local (private) businesses. Involvement of a local partner would make it easier for the local government to tax the venture in question (cf. Chapter 4), absorb local private investment capital and keep it in the locality (instead of seeing it flow off into e.g. Xi'an or Beijing real estate), and open up new development possibilities for the private firms by facilitating their participation often very large and capital- and technology intensive downstream projects (coal refining, power generation, etc.) that they would have found hard to get into by themselves (Interviews 70, 74⁵¹; 21 *CBH* 2011c).

5.6.1.2 Explaining Private-Sector Preservation in Shaanxi

Why did Shaanxi not nationalize its coal industry and instead opt for a mode of consolidation that was less disruptive to local interests? Lack of access to Shaanxi decision makers means that this question cannot be answered definitively. However, the available

⁵¹Shaanxi journalist specialized on energy topics (74), Shaanxi correspondent of a major national newspaper (70).

information does allow us to formulate and provide support for one hypothesis: lack of a major safety crisis meant that the Shaanxi leadership was under much less pressure to take radical action to restructure the coal industry, while the serious disruption of local interests that nationalization would have entailed would have provoked substantial and politically-costly resistance and created costly economic problems. Had the pressure for radical change been greater (i.e., had there been a serious safety crisis), the leadership might have been prepared to face down the likely resistance and shoulder the costs, but with pressure low it was not willing to do so. I next summarize the evidence supporting this hypothesis.

Accidents and Media Coverage. As shown in Chapter 3, between 1998 and 2012, 1914 workers died in Shaanxi's mines, compared to 2860 in Henan's and 5052 in Shanxi's. The province suffered four accidents with 30 or more deaths, while Henan suffered 12 and Shanxi 26. Moreover, all of these occurred before 2006. As a result, the province faced much less negative accident-related media coverage (cf. Figure 5.3 above and Figures 3.3 and 3.4 in Chapter 3).

Resistance. Had Shaanxi tried to enforce nationalization, this would almost certainly have prompted intense resistance. In Shanxi and Henan, local governments and mine owners had fiercely resisted nationalization, and liberal media outlets, academics and intellectuals had also sharply and volubly criticized these provinces' actions. The early assurances from Shaanxi officials that the province would not nationalize the mines probably pre-empted the formation of resistance (at any rate, none seems to have occurred), but there is no reason to believe that, *had* the province instead signaled an intention to nationalize, resistance would have been any less fierce than in Shanxi or Henan. Indeed, when Shaanxi nationalized its private oil industry in 2003, there was substantial resistance from the expropriated "oil bosses" (油老板), as well as an outcry from liberal media and scholars much like that which greeted Shanxi's coal nationalization (*The Economist* 2003, 2012; Interviews 6, 65⁵²).

Economic Damage. Even without overt resistance, expropriating a large sector of a major provincial industry that generated large amounts of tax receipts and employment would have been economically very damaging. As officials' remarks regarding the importance of preserving coal mining in the Shaannan cited above demonstrate, the provincial government was well-aware of these issues, and will have also had the cautionary example of Shanxi, where growth fell to 5.4% in 2009, the year of nationalization – far below that recorded by all other provinces (*China Data Online*).

Interviewees with whom I was able to discuss possible reasons for why Shaanxi had refrained from nationalization also emphasized the lack of a serious safety problem, and the concern over protests and resistance. Local journalists and academics believed that

⁵²Chinese journalist (6), Chinese academic who had studied the events surrounding the oil nationalization (65)

the fairly good safety performance overall and, as one emphasized, the relative lack of large and spectacular accidents in particular, meant that the province was under much less pressure, thus reducing incentives to take radical, disruptive action like nationalization (Interviews 70, 71, 72, 73, 79⁵³). Indeed, one of the journalists I interviewed claimed that a provincial official had explicitly told him that the province did not intend to nationalize the industry because there *was no serious safety problem*. The fact that those obligatory state-private tie-ups that *did* occur happened in the central Shaanxi mining districts (the most accident-prone part of the industry), but not elsewhere, is consistent with this.

Interviewees also repeatedly mentioned concerns over the likely resistance and protests that nationalization would occasion, and referenced the cautionary experience of the conflict over oil nationalization (Interviews 72, 75, 79⁵⁴). Of course, while severe, the resistance Shanxi faced did not ultimately stop nationalization there, and nor did the protests prompted by Shanxi's nationalization dissuade Henan. Both provinces should also have been aware of the events surrounding Shaanxi's oil nationalization, and evidently this did not stop them, either. Fears about resistance (much like concerns over economic damage) should thus probably not be seen as definitively ruling out radical, disruptive provincial-government action, and more as a sort of opportunity cost – which the government will, however, only be willing to pay if the incentives and the benefits to be gained from doing so (e.g. resolution of a safety crisis) outweigh these costs. In Shaanxi, it appears, this was not the case.

5.6.1.3 Economic Dislocations and Industry Change after 2012

As will be discussed in more detail in Section 5.6.3 on Inner Mongolia, in 2012 the coal market abruptly turned. Prices began a steep descent – falling by as much as 55% over the following several years – and have yet to recover, as demand evaporated with the end of China's decade-long investment boom and very substantial new coal mining capacity simultaneously came on stream. Northern Shaanxi seems to have been one of the harder-hit regions of the country – albeit not as hard hit as Inner Mongolia – due to the great distances separating the coal regions of the province from the main coal-consuming sites in eastern and southern China, which pushed up transport costs. This affected private mines the most, as they had least access to the railway system to transport coal, and relied on (more expensive) trucking to transport their coal to market. While no production data are available to me for Shaanxi after 2012, media reports paint a consistent picture of large numbers of private mines in Shaanxi halting production or even closing in the years 2013, 2014 and 2015, as their earnings could

⁵³Shaanxi correspondent of a major national newspaper (70), chief engineer at a Shaanxi coal-industry research institute (71), Shaanxi economists, one of whom consults extensively for the government and one of whom is from Yulin and specialized on energy topics (72, 73), Shaanxi journalist specialized on energy topics (79).

⁵⁴Shaanxi economists (72, 75), Shaanxi journalist specialized on energy topics (79).

no longer cover production costs. SOEs by contrast tended to continue producing, both because of political imperatives to preserve employment and their softer budget constraints, and because their greater scale economies and access to railings gave them better cost structures (*21 CBH* 2013, *Sina Finance* 2014, *EO* 2013b, *China Business* 2015, *China Times* 2013). Technically, these now-closed private mines seem to have generally remained privately owned (interest in acquiring new mines evaporated with the coal price), but unless coal prices recover (which seems increasingly unlikely) they may never return to production. Thus going forward we may well see a substantially more consolidated coal industry, with a much greater share of state ownership, come about in Shaanxi, too, albeit as a result of market shifts, not of government policy.

5.6.2 Guizhou

5.6.2.1 Policy Analysis and Outcomes of the Consolidation Campaign

Guizhou initiated a renewed push to consolidate its coal industry in April 2011, with the publication of what became known as Document 47, entitled “Guiding Opinion on Pushing Forward Mergers and Restructuring of Coal-Mining Enterprises” (Guizhou 2011). This push proceeded in two stages; from 2011 to 2013 and 2013 to 2015, and overall it resembled Shaanxi’s approach relatively closely. There was no systematic effort to nationalize coal mining. Consolidation instead seems to have mainly involved private firms merging among each other. While targets for large nominal reductions in the number of firms and mines were set, these were complemented with loopholes that facilitated the preservation of much of the extant ownership and production structure, thus accommodating the existing local business and political interests.

Document 47 set a target of reducing the total number of coal-mining *firms* in the province from around 1660 to 200 by consolidating the existing enterprises and their mines in each locality into a number of “enterprise groups” (企业集团).⁵⁵ The municipalities were to submit consolidation plans (兼并重组方案) for their locality by June 2011, with implementation to run through to 2013. Minimum production capacities that the enterprise groups would have to meet *after* consolidation were defined for each municipality, ranging from 2 million tons output in Liupanshui (六盘水) to 800,000 tons in Tongren (铜仁). Groups with 5 million tons output or more were to make up 60% of provincial output by 2014. No specific targets for the number or minimum-size of *mines* (the physical sites of production) was set, but the document implied that, except for areas with complex geologies, mines would in future have to be larger than

⁵⁵Since the 1980s there has been a broad general effort underway in China, inspired by the example of the Japanese Keiretsu, to organize businesses as “enterprise groups”. (Essentially, a holding or “group” company plus various subsidiary or branch companies and sometimes a financing arm. For discussion see Keister 2000.) Guizhou’s use of this term to describe its consolidation policy was thus nothing particularly unusual or special.

90,000 tons. 45% of small mines were to have mechanized their mining processes by end-2013, and 55% by 2015 (Guizhou 2011). In December 2012, further, more ambitious targets were set. The number of (group) enterprises was now to be reduced to just 100 by spring 2014, with 1.5 million tons output the minimum size that enterprise groups would have to meet. The number of mines was to be cut to about 1000 – from currently about 1800 (cf. Guizhou Land and Resources Bureau 2011) – with all mines smaller than 150,000 tons to be eliminated (淘汰). All localities were ordered to reduce their mine numbers by about 50%.⁵⁶ By end-March 2013 the localities were to submit further consolidation plans outlining which firms would consolidate which other firms and mines in their locality to form enterprise groups, and which mines would be shut down (Guizhou 2012, 2013).

What effects did this consolidation drive have on ownership and production structures, and specifically on the relative share of the industry under state and private ownership? The last available output data are for 2011 and 2012. This shows that in 2011, private (“township and village”) mines accounted for 75% of total provincial output. In 2012, Guizhou switched to reporting coal output only in terms of output from Key State Mines and “Local Mines”, and that year “local mines” accounted for 78.5% of total provincial coal production. Throughout the 2000s, the local-state coal sector in Guizhou was minuscule (cf. Figure 4.3 in Chapter 4), and for the reasons discussed in the next paragraph, we can be confident that this “local-mine” production very largely reflected output from private mines. In other words, after the first year and a half of consolidation, ownership structures had changed very little.

What about possible changes that might have taken place in 2013 and 2014? Interviewees I spoke with in Guizhou in May 2013 described the consolidation processes then underway as largely involving private mining companies merging among each other, and state miners merging with other state miners. Acquisitions of privates by state enterprises did occasionally take place, but due to their small scale and Guizhou’s complex geology most of the private mines were of limited interest to the large state groups, and the province was unwilling to force such tie-ups onto either the SOEs, or on the privates and local governments (Interviews 56, 57, 58, 59, 60).⁵⁷ Media reports also indicated a prevalence of private-private and state-state mergers: the coverage of Guizhou’s coal consolidation that I am aware of mostly describes mergers of this type (*21 CBH* 2012c; Mining.com 2012; *National Business Daily* 2013a, 2013c; *West Times* 2013; Xinhua 2014; Zijin Net 2013). Given the wide public interest that the nationalizations in Shanxi and Henan had attracted, it is hard to believe that, *had* acquisitions

⁵⁶That would cut total mine numbers to around 900, not 1000. These somewhat conflicting targets were not reconciled.

⁵⁷Chief engineer of a county coal-industry bureau and his assistant (60, joint interview), senior engineer from a provincial coal-industry research institute (56), Former official from the Guizhou provincial coal-industry bureau who is now a coal trader, and businessman with interests in the Guizhou energy sector (57, joint interview), Guizhou journalist whose family is active in the coal trade (58), Guizhou economists, one of whom was formerly invested in the local mining industry (59, joint interview).

of privates by state firms predominated in Guizhou, this would *not* have attracted sustained media attention and commentary, especially as such acquisitions would likely have triggered substantial social conflict.⁵⁸

As noted above, the consolidation process was structured in such a way as to create loopholes that facilitated preservation of the existing ownership and production structure. These loopholes remained in place in 2013 and 2014 – indeed, they did so even after critical press coverage had highlighted them, suggesting that their existence was no oversight, but a deliberate effort to accommodate local interests – and this too suggests that outcomes from the consolidation campaign after May 2013 should not have been materially different to outcomes in the period May 2011 to May 2013.

What about the effects of the coal-market collapse? On this I have no data. However, as will be discussed at the close of this section, there are several reasons to think that Guizhou producers – including privates – might have been hit less severely than those in Shaanxi or Inner Mongolia.

The consolidation rules defined in Document 47 (and reiterated in December 2012 and March 2013; cf. Guizhou 2012, 2013) facilitated the preservation of private ownership in several ways. Firstly, Document 47 was studiously neutral with respect to ownership, noting only that “both state and private coal-mining firms are to be supported to act as consolidators, provided they meet conditions” (支持符合条件的国有和民营煤矿企业成为兼并重组主体) (Guizhou 2011). The permissibility of privates acting as consolidators was also subsequently reiterated by officials in media interviews (e.g. *West Times* 2013). At the same time, the document remained vague about what the “conditions” were that consolidators were supposed to meet, calling only for “supporting firms that possess economic, technological and managerial superiority to acquire backward enterprises” (支持具有经济、技术和管理优势的企业兼并重组落后企业), without further defining these terms.

The only precise numerical benchmark for consolidators defined in the document was one that the enterprise groups would have to meet *after* consolidation (aggregate output of between 1.5 and 2 million tons, depending on locale). In other words, this target did not govern eligibility to act as consolidator. Rather, the consolidation plans submitted by the local governments in June 2011 and March 2013 would have to prove that the local enterprise groups earmarked as consolidators would be able to meet these targets, whereupon they would receive a “consolidator’s license” (兼并主体资格) (Guizhou 2011, 2012).

⁵⁸Given the large role that seems to have been played by non-Shanxiite mine owners in organizing the resistance to nationalization in Shanxi, it is worth noting that a large proportion of Guizhou’s coal mines, too, appear to have been owned by non-Guizhouites. The senior engineer from a Guizhou coal industry research institute I interviewed estimated that some 60% of the mines were owned by private investors from outside the province, especially from Guangdong, Zhejiang, and Jiangsu. Interview 56.

It is worth comparing these stipulations to Shanxi. There, it will be recalled, firms had to meet tough minimal-scale requirements *prior* to consolidation in order to be permitted to act as consolidators and acquire other firms, a stipulation that ensured that most acquirers would be SOEs. Moreover, Shanxi stipulated that only firms whose main business was coal mining would be permitted to take controlling stakes in mines (控股). Firms from coal-related sectors like electricity or steel were invited to participate, but only by taking non-controlling equity stakes (参股) (Shanxi 2008). By contrast – and despite the vague language about consolidators having to “possess [presumably, mining-related] technological superiority” – Guizhou was open to investment from any quarter. Thus, a number of large private real estate (!) companies used the consolidation as an opportunity to acquire coal mines in Guizhou.⁵⁹

In theory, enterprise groups that failed to meet the benchmark size and were refused the “consolidator license” would not be permitted to form, and the mines and enterprises they were to merge would have to find other acquirers (Guizhou 2013). However, there are indications that this was handled rather flexibly in practice. In fall 2013, the deputy head of the Guizhou Energy Bureau told journalists that if enterprise groups failed to meet the minimum output requirements, they would be given additional time to acquire further mines or enlarge existing ones to reach the required size (*National Business Daily* 2013c). In July 2015 (!) a note from Zunyi municipality (遵义), the third-largest coal producing area of the province, reported that of the 18 coal-mining enterprise groups in the municipality, only 13 had so far obtained the consolidator license (Zunyi 2015). In other words, three and a half years after this round of consolidation had commenced, almost a third of enterprise groups in Zunyi had not obtained official recognition by the provincial authorities, but seem to have nevertheless remained in business.

A further important loophole was that the province avoided defining what degree of transfer of property or control rights “consolidation” had to involve, and in practice tolerated some extremely loose tie-ups among mining firms seeking to form “enterprise groups”. The best documented case of this involves Heilongjiang Tianlun Zhiye (黑龙江天伦置业), a Heilongjiang and Shenzhen-based private real-estate developer. From 2008 onwards, Tianlun had acquired several mines in Guizhou. However, their combined production capacity was not enough to meet the scale required to obtain a consolidator license (*National Business Daily* 2013a) and so Tianlun began acquiring further mines in order to make the scale. However, in most of the mines “acquired” it only took between 1% and 5% of the equity and thus, the acquisition agreements specified, only obtained 1% to 5% of the control rights and rights to the residual profit (*National Business Daily* 2013b, Tianlun 2014b).

What makes the Tianlun case significant is that it was revealed in the media in summer 2013, with coverage highlighting the existence of this particular loophole (漏洞;

⁵⁹Cases include Heilongjiang Tianlun Zhiye (discussed further below in the main text), the Jilin Chengcheng Group (吉林成城集团), and the Zhejiang Xinhua Group (浙江新湖集团) (*West Times* 2013).

a term used in the coverage). This was distinctly embarrassing for the Guizhou authorities. With evident amusement, journalists described how Guizhou Energy Bureau spokespeople fumbled to explain how an acquisition of 1% of equity could constitute consolidation, by arguing that this was “an internal matter for the enterprises [and did not concern the government]” (这是企业内部的事) and that the provincial authorities had not made any stipulations as to the levels of equity transferal required (*National Business Daily* 2013). Yet despite these embarrassing revelations, the authorities did *not* close this loophole: on the contrary, in 2014 Tianlun obtained its “consolidator license” and “acquired” several further mines in the same fashion (again taking only 1% to 5% of equity) (Shanghai Stock Information Services 2014, Tianlun 2014a, 2014b).

Tianlun appears to have by no means been the only company able to undertake such loose mergers. Media reports repeatedly described as common the phenomenon of private mining firms nominally merging their businesses in order to meet consolidation requirements while really maintaining entirely separate production, sales, finance and accounting systems; what one mine owner described as “putting on an integration hat” (戴了一顶统一的帽子) (*National Business Daily* 2013c, *West Times* 2013, Zijin Net 2013). This was also affirmed by several interviewees (Interviews 57, 58⁶⁰). One coal-sector analyst praised this flexibility as a case of industry reform by “crossing the river by feeling for stones” that reconciled consolidation with the need to preserve local (privately-owned) industrial structures for reasons of employment and fiscal revenue (Zijin Net 2013). From a rather different perspective, *China Coal News*, an official outlet of the State Agency for Work Safety (SAWS, the central-state agency pressing most aggressively for the closure of small mines), complained that “a small number” of enterprise groups formed during consolidation in Guizhou were “sham companies hastily knocked together that lack the strength to implement the mine merger agreements signed (少数主体企业实力不足甚至个别是临时拼凑的“皮包公司”，与被兼并煤矿签订兼并协议后无力履约) (*China Coal News* 2013).

As this complaint from SAWS indicates, mergers and closures of *mines* (the physical sites of coal production) seem to have been enforced equally “flexibly” as mergers of mining *companies* (the superordinate business organizations) were. The fundamental problem was that geologically, most coal fields in Guizhou are small and scattered, making it difficult and expensive to integrate mines physically, or to expand their scale and upgrade their production facilities. At the same time, mine owners, local governments and the rural population depended on these mines for jobs, fiscal income, and profits. Unsurprisingly, both media reports and interviews revealed much grumbling and discontent among local officials about closing down mines, and interviewees indicated that through to May 2013, at least, only limited progress had been made with closures or

⁶⁰Former official from the Guizhou provincial coal-industry bureau who is now a coal trader, and businessman with interests in the Guizhou energy sector (57, joint interview), Guizhou journalist whose family is active in the coal trade (58).

mine-mergers (Interviews 56, 57, 58, 60⁶¹). Indeed, even just-closed mines were sometimes reopened when local coal markets became tight (*China Newsweek* 2012). As the staff from a county coal-industry bureau argued, while safety was of course important and small mines less safe than large ones, simply closing the former down meant wasting coal resources that could not be mined economically by large establishments. That however would hurt local economic development (Interview 60)⁶².

To what extent might this have changed after May 2013? Hard data are naturally scarce, however, what numbers there are suggest that also thereafter probably only relatively few government-enforced closures took place, with localities preferring instead to merge mines. In early 2013 Guizhou set a target of reducing mine numbers to about 1000 by 2014, from currently roughly 1800, with each municipality tasked to close about half (Guizhou 2013). Accordingly, in October 2013, Zunyi municipality ordered that the number of mines in its administrative area was to be reduced to 133 by July 2014 (Zunyi 2013), from then about 246 (cf. Guizhou 2011). Yet in July 2015 we read that Zunyi had so far only closed 53 mines in total since 2012. The rest were presumably being merged, at least nominally (Zunyi 2015).⁶³ Guizhou itself reported closures of only 262 mines in the entire province in 2013 and 2014 (270 according to the NEA), with a further 450 instead undergoing mergers or upgrading and capacity expansion (Guizhou 2014, 2015; NEA 2013, 2014).

How real all of these mergers and upgrades or capacity expansions were is hard to say, but skepticism may be appropriate. As discussed in Chapter 4 and the section on Shaanxi above, it was hardly unknown for local governments and owners to fake mergers or upgrades, especially if they made little physical-geological or business sense. The interviewed Guizhou county coal-industry bureau staff told me that they had had great problems motivating mine owners to undertake mergers or upgrading/expansion, but that they would also not close them down for failing to do so (as they were required by regulation). Instead, they would just levy a fine on the enterprise concerned (Interview 60)⁶⁴. Failure by a wide margin to hit targets for mine closures would be nothing new. In 2006 – reiterated in 2007 – Guizhou had already once set a target for bringing the total number of mines in the province down to 1000 by 2010 (Guizhou 2006, 2007). Yet in 2011, provincial investigators found that there were still 1794 mines in the province (Guizhou Land and Resources Bureau 2011).

In summary, the available evidence suggests strongly that, like Shaanxi and unlike Shanxi and Henan, Guizhou undertook a form of industry restructuring that largely

⁶¹Senior engineer from a Guizhou coal industry research institute (56), former official from the Guizhou provincial coal-industry bureau who is now a coal trader, and businessman with interests in the Guizhou energy sector (57, joint interview), Guizhou journalist whose family is active in the coal trade (58), Chief engineer of a county coal-industry bureau and his assistant (60, joint interview).

⁶²Chief engineer of a county coal-industry bureau and his assistant (joint interview).

⁶³Confusingly, the city also reported that there were currently 270 mines in the municipality (Zunyi 2015). I have no way of harmonizing these conflicting figures with each other.

⁶⁴Chief engineer of a county coal-industry bureau and his assistant (joint interview).

accommodated local business and political interests. There was no obligatory nationalization of private mining companies, and the consolidation of firms and mines, too, was handled in ways that seem to have often preserved the extant industrial and ownership structures. Why?

5.6.2.2 Explaining Private-Sector Preservation in Guizhou

Interviewees in Guizhou attributed the reluctance of the provincial authorities to act in more radical ways to the complexity of the interests involved in the private mining sector, specifically, the extent to which local authorities depended on the sector for fiscal revenue and the provision of local employment, and the extent to which cadres and their families and friends were invested in the sector, which the provincial leaders, according to the interviewees, were unwilling to disrupt too severely. They also stressed that relatively few of the private mines in Guizhou constituted attractive take-over targets for the SOEs, at least at the prevailing market prices (Interviews 57, 59, 58)⁶⁵.

Yet these factors also existed in Shanxi and Henan. In both provinces there was strong resistance from local officialdom and especially in Shanxi, also from the “coal bosses” and wider parts of civil society. For the SOEs in Shanxi and Henan, many of the small private mining companies do not seem to have constituted particularly attractive take-over targets, either (cf. Chapter 4). As noted above, the economic dislocation created by nationalization in Shanxi sharply hit economic growth in 2009. Arguably these problems might have been even more severe in Guizhou than in Shanxi and Henan, since it is a significantly poorer province. Yet Shanxi and Henan were ultimately willing to accept significant costs in these domains as the price of ensuring nationalization. Guizhou was not.

I argued above that Shanxi and Henan ultimately chose to restructure their coal industries in such radical and, to local interests, damaging ways because of the high pressure they found themselves under over mining accidents. Pressure was high because accidents in both provinces attracted substantial media coverage and because the Chinese party-state’s disciplinary system is systematically biased towards penalizing local and provincial officials severely over accidents that are large and/or attract intensive media coverage and public attention.

On these dimensions Guizhou seems to have been under much less pressure. As we have seen, although Guizhou suffered significantly more fatalities than Shanxi or Henan and had a far worse deaths-to-coal-output ratio, there was much less coverage of accidents in Guizhou than there was of accidents in Shanxi and Henan, and compared at least to Shanxi (we have no data for Henan) significantly fewer officials in Guizhou were

⁶⁵Former official from the Guizhou provincial coal-industry bureau who is now a coal trader, and businessman with interests in the Guizhou energy sector (57, joint interview), Guizhou journalist whose family is active in the coal trade (58), Guizhou economists (59, joint interview).

disciplined over accidents and those sanctioned tended to be of lower rank and receive more lenient penalties. The lower level of media coverage seems to have been due to the fact that there were few *large* accidents in Guizhou, as well as the province's general remoteness, and the less severe disciplinary sanctions in turn were a consequence both of the relative absence of large accidents and the lower levels of media coverage (cf. Chapter 3). This in turn provides an explanation for why Guizhou refrained from forcing through radical change in its coal industry: the apparently lower level of pressure over accidents would have meant that the cost of not enforcing radical change was relatively low while, conversely, the opportunity cost of doing so was high.

The evidence from interviews tends to support this explanation. Interviewees in Guizhou repeatedly argued that while mining safety was of course important and its political significance had increased somewhat in the later 2000s, ultimately, in Guizhou, the overriding priority was still development and safety was thus a somewhat lower priority (Interviews 57, 58, 59)⁶⁶. Indeed, two interviewees related this directly to the absence of large accidents that attracted the attention of “public opinion” (社会舆论) in Guizhou, and contrasted this with the situation in Shanxi, where the frequent large accidents *did* draw such attention, placing the government under pressure (Interview 59)⁶⁷.

5.6.2.3 Economic Dislocations and Industry Change after 2012

While firm data are not yet available, there are several reasons to suspect that the collapse of the national coal market after 2011 might have affected Guizhou – and Guizhou’s private producers in particular – less severely than those in Shaanxi and Inner Mongolia. For one, there is evidence from silence. In the years 2013 to 2015, large numbers of media articles were published describing how Shaanxi and Inner Mongolia’s “coal bosses” were being forced out of business by the market downturn, thereby precipitating local financial turmoil as the informal private lending networks of northern Shaanxi and western Inner Mongolia (which the private mines had relied on for financing) were overwhelmed with bad credits and non-performing loans. No comparable stories seem to have been reported for Guizhou. This might well at least in part reflect the general lack of press coverage of events in Guizhou. However, at least as of May 2013 – when the industry crisis was already well-underway in Inner Mongolia and Shaanxi – interviewees in Guizhou still described coal as profitable (Interviews 57, 58)⁶⁸, and in early 2012 – when prices were beginning to slide in Shanxi and Inner Mongolia – Guizhou was still permitting just-closed mines to reopen because demand was

⁶⁶Former official from the Guizhou provincial coal-industry bureau who is now a coal trader, and businessman with interests in the Guizhou energy sector (57, joint interview), Guizhou journalist whose family is active in the coal trade (58), Guizhou economists (59, joint interview).

⁶⁷Guizhou economists.

⁶⁸Former official from the Guizhou provincial coal-industry bureau who is now a coal trader, and businessman with interests in the Guizhou energy sector (57, joint interview), Guizhou journalist whose family is active in the coal trade (58).

still exceeding supply in local coal markets (*China Newsweek* 2012). In other words, what – sparse – evidence is available suggests that Guizhou might have been hit later and perhaps less severely by the downturn than other provinces were. Two structural features of Guizhou's coal market lend additional plausibility to this hypothesis.

First, Guizhou producers tend to face shorter transport distances than those in Shaanxi or Inner Mongolia, as they sell mainly to the neighboring provinces of Guangxi, Guangdong and Hunan, or to power stations within Guizhou, which then export electricity to Guangdong. In other words, access to railings is a less decisive competitive advantage.

Second, the predominance of small coal fields in Guizhou means that small-scale mines do not have the same dis-economies of scale that small privates in northern Shaanxi or western Inner Mongolia have to contend with. Western Inner Mongolia and northern Shaanxi have large, shallow coalfields that suit large-scale opencast mining. Because these fields were only developed in the 2000s, the SOEs present there have been able to build very large and modern opencast mines, granting them considerable scale economies. These simply do not exist in Guizhou (which is why the large SOEs have been less interested in buying or building mines there). Historically, under these conditions, the small-scale, labor- rather than capital-intensive private mines have tended to outperform the large SOEs. Thus, during the coal market downturn in the late 1990s – which was before northern Shaanxi and western Inner Mongolia had emerged as significant coal-producing regions – the private mines had tended to beat the SOEs (cf. Wright 2000a, 2007).

It remains to be seen how well Guizhou's privates have weathered the current downturn, but the just-discussed factors do suggest that it is possible that they have done so rather better than their counterparts elsewhere.

5.6.3 Inner Mongolia

Like Guizhou, Inner Mongolia Autonomous Region (IMAR) initiated a new round of mergers and restructuring of coal-mining enterprises in spring 2011. The consolidation policy measures IMAR designed bore some resemblance to Shanxi's, in that the authorities sought to select certain firms as preferred consolidators. However, while in Shanxi these measures had been put in service of provincial government-orchestrated nationalization, in IMAR they were used to facilitate local-government support of the private sector.

Due to the peculiar circumstances of industrial development in IMAR in the 1980s and 1990s, by the 2000s the region possessed no provincially or subprovincially-owned state coal sector to speak of (almost all state coal firms active in IMAR were centrally-owned firms), but it did have a significant number of very large *private* industrial and mining companies. Geographically, these firms were concentrated in western IMAR,

the center of the province's coal industry. The consolidation *policy* adopted by the localities and the provincial government sought above all to aggressively foster the growth of these private "local champion" firms. To what extent *outcomes* corresponded to this policy ambitions is harder to say. Certainly, no large-scale takeovers of private mines by SOEs seems to have occurred (though individual, voluntary buy-outs certainly happened). However, after 2011 the coal market all but collapsed. This obstructed industry consolidation through mergers and acquisitions, but it does seem to have led to growing industry consolidation under large SOEs after 2012, as price declines – not government action – forced many of the privates to exit.

5.6.3.1 Policy Analysis

The plan for mergers and restructuring of coal-mining enterprises that IMAR released in May 2011 set a target of reducing the number of "local coal-producing enterprises" (地方煤炭生产企业) to between 80 and 100 firms by end-2013 through mergers and restructuring, with all remaining enterprises to have production capacities of at least 1.2 million tons of coal. Implementation was to run from mid-2011 to end-2013, though localities were free to set earlier dates for completion, something Ordos city (鄂尔多斯), at least, did (IMAR 2011, Ordos 2011). (Ordos completed mergers and restructuring by mid-summer 2012; cf. *China Times* 2012b.)

With regard to ownership, the plan trod a fine and ambiguous line. On the one hand, it called on local authorities to "encourage" (鼓励) "qualified large-scale state enterprises situated in IMAR" (区内有条件的大型国有企业) to "participate in mergers and restructuring" (i.e. to acquire mines). On the other hand, it also called for using consolidation to create 21 to 23 "local coal-producing enterprises" (地方煤炭生产企业) with between 10 and 100 million tons production capacity. While the term "local coal-producing enterprise" has no established legal-administrative meaning that I am aware of, it is generally used to refer to firms under the regulatory and administrative control of local (subprovincial) governments. In other words, the plan in effect also called for *strengthening* the "local" coal sector (meaning, given IMAR's industrial structure, mainly the private coal sector), by making these local firms larger and thus, it was hoped, stronger (IMAR 2011).

Even more importantly, the plan largely outsourced decision-making over which firms would get to act as consolidators to the municipal governments. It stipulated that the municipalities were to "determine" (确立) which firms would be the consolidators (though the province reserved to itself the right to give final approval [审批] to the municipalities' choices). The provincial authorities did stipulate that *preference* was to be given to firms with at least 5 million tons firm-level production capacity or one underground mine of 1.2 million tons (3 million tons for open cast mines) to act as consolidators (可优先作为兼并主体) (IMAR 2011) – but since this was only a statement of preference, it *de facto* legitimized permitting smaller firms, too, to act as consolidators. As we will see, this indeed happened (probably often), and in practice the

minimum-scales requirements seem to have served as much as targets to be obtained *through* consolidation (i.e., to be achieved *after* consolidation) than as prerequisites to being allowed to act as consolidator.

Given that the plan outsourced key decision-making powers to the municipalities, the precise wording the plan had used with respect to SOEs – that they were to be “encouraged” to participate in consolidation – deserves further analysis. As Fan Xiaoqiang (范小强), a lawyer from a firm specialized on mining and energy law pointed out, this was in fact a weak formulation: while it “paid tribute to the special status of the large SOEs” (照顾了大型国有企业的特殊面子), it avoided any further commitments, and “to what extent [the large SOEs will really be able to] participate in consolidation will have to be settled by the SOEs themselves in negotiations between them and the municipalities”, who were generally hostile to the large SOEs (Fan 2012; for similar points made in press commentary see *China Times* 2011b, *China Energy News* 2011b). Indeed, we will see below that there is evidence for municipalities discriminating against SOEs (and non-local firms in general) and trying to limit the extent to which SOEs would be able to act as consolidators, something the provincial government seems to have tolerated.

Below, I will return to the question of *why* IMAR trod such a fine and ambiguous line over SOE participation in consolidation. For now, the important thing to note is that the provincial government effectively granted the municipalities significant power to determine the course of consolidation: they would largely decide which firms got to act as consolidators in their areas. While the province had expressed a preference for large firms to act as consolidators and encouraged SOE participation, neither was formulated as an unavoidable command, and the language about SOE participation was moreover balanced by a commitment to build up strong *local* coal enterprises.⁶⁹ Furthermore, the provincial authorities tolerated the introduction of special rules by the municipalities that discriminated against outside and/or state firms.

Unsurprisingly, the localities appear to have made full use of these powers to protect local firms and limit the extent of mine takeovers by outside SOEs. Certainly, this is very much in evidence in the two municipal consolidation plans I was able to obtain, those of Ordos and Wuhai (乌海). The Ordos plan stipulated that eight firms were to act as the primary consolidators in the municipality. Confusingly, though, it only listed seven by name; Yitai (伊泰), Huineng (汇能), Yidong (伊东), Manshi (满世), Wulan (乌兰), Mengtai (蒙泰) and Tehong (特弘). All of these are private companies.⁷⁰ One

⁶⁹This concern with building up strong *local* coal firms was also emphasized in several other policy documents IMAR issued around the same time, such as the List of 30 Key Coal-Mining Enterprises (at least 14 of which were local privates; cf. Chapter 4, Section 4.7.2, and IMAR’s 2012 *Twelfth Five-Year Plan for the Coal Industry*, which singled out the 30 Key Coal Enterprises for special support.

⁷⁰On Yitai, Yidong, Manshi and Huineng see Chapter 4, Section 4.7.2. Tehong and Wulan appear in the All-China Federation of Industry and Commerce’s 2012 and 2013 lists of 500 largest private companies (中国民营企业500强). On its website, Mengtai describes itself as a privatized SOE (蒙泰公司由国有企业改制为民营企业) and was listed as one of the 100 largest private companies in IMAR in

newspaper report indicated that Shenhua was the eighth firm (*China Times* 2012b). This is plausible, since the Shenhua operated large mines in Ordos and precluding *all* SOE participation was hardly feasible. Subsequently, about 40 further companies were added to the list of approved consolidators, of which half were reported to be private firms (*China Times* 2012b, *North News* 2012). Similarly, of the 18 firms that Wuhai municipality chose as consolidators (Wuhai 2011), 11 were definitely identifiable as private (民营) firms and a further two are likely to have been private. Only one company could be identified with certainty as an SOE. (No information could be obtained about four companies).⁷¹ In short, Wuhai too sought to ensure that consolidation would strengthen, and not eliminate, key local private firms.

Ordos and Wuhai also took further steps to facilitate the preservation of the local privately-owned coal-mining industry. Thus, Ordos included mergers or alliances *between* small firms (小小联合) as an acceptable way of achieving the goal of industry consolidation (Ordos 2011). Small firms could merge or form an enterprise alliance, registering this as a new company, which would now be classed as a consolidator (兼并主体). This was very important, because it meant that small firms had alternatives to letting themselves be acquired by large firms – especially, as the Ordos government seems to have tacitly allowed these small-firm alliances to be very loose, with the member firms retaining independent control over all or most management decisions, or just paying a recognized consolidator a “registration” or “management fee” (挂靠费、管理费) in order to be listed as (nominally) belonging to the consolidator (*China Business* 2012, *Northern Weekend* 2012b).

Both municipalities also included regulations in their consolidation plans that actively discriminated against outside firms. Ordos made it a “basic principle” (基本原则) of its consolidation plan that “local firms” (本地企业) were to get preference over “outside firms” (外地) to act as consolidators (Ordos 2011). While outside firms certainly did acquire mines, this “principle” does not seem to have remained a dead letter, either. Thus one manager from a – state-owned⁷² – Shandong coal-mining company trying to buy mines in Ordos complained to the *Economic Observer* newspaper about discrimination, noting that “Ordos . . . is blocking outside firms from acquiring [mines], kicking out firms from other provinces. They basically only permit their own companies to grow big.” (鄂尔多斯…关起门来做兼并，只允许自己的企业壮大，把外省企业踢在了门

2007 (cf. <http://www.mengtaigroup.com>). The website of the IMAR Coal Industry Bureau also lists Mengtai as private (http://www.nmgmt.gov.cn/zdqylb_show1.aspx?id=46).

⁷¹For the list of companies see Appendix. Firms were coded as private if they appeared in “Largest-100/Largest-500 Private Enterprises” lists, if they self-described as private (民营, 私营) on their websites, or if information provided in stock market disclosures revealed private ownership structures. When companies were reported as private (民营, 私营) on commercial websites providing basic information about mining companies (e.g. coal.job1001.com), this was treated as indicating that they were probably private, but without providing certainty.

⁷²The article only identified the company as “a Shandong coal corporation” (山东省一位煤矿集团), but since there was no private sector to speak of in Shandong’s coal industry, we can assume that the company was an SOE.

外.) (*EO* 2012d). Wuhai went even further, stipulating that *SOEs* (!) wishing to make acquisitions would have to undergo a complex two-stage approval process. Their participation in the consolidation process would have to first be “researched and approved” by the city government, and then submitted to the province for further approval. Only thereafter would they be allowed to acquire mines (国有企业在我市参与兼并重组，必须经市政府研究同意，并报自治区批准后方可参与) (Wuhai 2011).

How “representative” is this behavior by Ordos and Wuhai likely to have been? Is it probable that other municipalities acted similarly? While we cannot be certain without access to their consolidation plans, it is very likely that they took similar steps to protect local and private firms. As we have seen throughout this dissertation, except in extreme circumstances like Linfen’s accident crisis, local governments were much concerned to avoid having all or most of the local firms taken over by powerful outside SOEs. There is no obvious reason why this should have been any different in other parts of IMAR. *Conceivably*, Ordos’ status as the center of IMAR’s coal industry (accounting for 60% of provincial output) might have given the city particularly strong influence with the provincial government, allowing it to insist on special conditions, but Wuhai – a much more marginal coal producer – evidently could also take quite similar actions, suggesting that Ordos was not in fact a special case.

5.6.3.2 Outcomes

Inner Mongolian authorities sought to structure consolidation so as to facilitate the preservation of a substantial private, locally-controlled coal industry, and avoid large-scale SOE takeovers. What exactly happened on the ground during consolidation in 2011 and 2012, however, is harder to say, for two reasons: Firstly, the announcement of a new round of industry consolidation in spring 2011 seems to have triggered a rush by state and private investors from across China to buy mines and lock in coal reserves in IMAR. This caused prices for mines to spiral, thereby both incentivizing owners to sell *and* obstructing consolidation (because mines became unaffordable). Secondly, there are the effects of the abrupt and dramatic collapse of coal prices, which began in late 2011 and gathered speed in 2012 and 2013. This hit Inner Mongolia and its private sector particularly hard, bringing the surge of investment interest to an abrupt end and making post-2012 output data a much more uncertain indicator of ownership structures than the output data are up to 2012. I begin by discussing the shift in the coal market that took place in 2012/2013, and then turn to what the output data and the more qualitative sources suggest happened during consolidation in 2011 and 2012.

Apart from a period of about six to ten months between the onset of the worldwide Financial Crisis in 2008 and the boost to confidence, demand and prices delivered by China’s RMB 4 trillion stimulus package in spring and summer 2009, coal demand and prices in China rose steadily throughout the 2000s. As a result, coal mining had generally been profitable (often highly so), making it easy to use output data as a fairly

reliable proxy for ownership structures: during the 2000s, anyone who owned mines generally had a strong incentive to produce. This changed abruptly after 2011, as slumping demand interacted with the very large new production capacity that had come on stream in the 2000s and 2010s. Prices in Shanxi (a benchmark indicator) reached their all-time post-2008 high in October 2011 and, but then began falling sharply. By July 2012, they were down 34%, a decline that has since continued (cf. Figure 5.4). In Inner Mongolia, prices reportedly only began falling in spring 2012, but by spring 2013 they had already slumped to lows last seen during the depths of Financial Crisis in 2009 (IMAR? 2013). Inner Mongolian producers began reducing or even completely stopping production as early as summer 2012. By 2013, two-thirds of Ordos mines had apparently stopped production or closed down entirely as prices fell to cost levels or even below (*China Economic Weekly* 2012; *Securities Daily* 2013a, 2013b; *Economy & Nation Weekly* 2013).



Figure 5.4: **Shanxi Coal Prices, 2003 – 2015 (Datong Mixed Blend, FOB)**

Source: finance.ifeng.com

Inner Mongolia in general and its private mines in particular were among the hardest hit in the entire country by the price decline, possibly the hardest hit. The reason for this was transport costs. The key bottleneck in China's coal supply system is the railway network, which remains particularly limited in IMAR. Even in 2013, around 68% of Ordos' coal had to be trucked to the main east coast ports and consumption sites (*Economy & Nation Weekly* 2013) – a significantly more expensive form of transport

than railings. Moreover, the distances to be covered were the largest in China: while coal from northern Shaanxi “only” had to travel about 800 kilometers, and that from Shanxi just 300–600 kilometers, Inner Mongolian producers faced distances of 1000 kilometers to market. Accordingly, Inner Mongolian trucked coal was the most expensive in the country (Cornot-Gandolphe 2014, Li 2013). Access to the railway system is controlled by central and to a lesser extent provincial authorities, wherefore private firms had especially poor access to it and depended mainly on road haulage. In IMAR, the largest privates – especially those listed as “key coalmining enterprises” by the provincial authorities – had some access to the railway system⁷³, but they had to share this access with favored central-government producers like Shenhua, and the broad mass of smaller producers enjoyed very little access to railings (Interviews 29, 66, 81⁷⁴).

Coal output data reported that private/TVM output fell sharply in IMAR in 2013, to 22% of total output, from 42% in 2012, with total private output cut in half (cf. Figure 4.6 in Chapter 4). What the output data do not say is whether this abrupt decrease in private production was due to privates being taken over by state mines (whose output continued to grow), or due to privates shuttering production because of the price collapse.⁷⁵ Media coverage as well as the wider evidence however gives strong reason to believe that it was the latter, and not the former, though some – voluntary – buy-outs of privates by state firms certainly occurred, as did at least occasional buy-outs of state firms by privates.

The coal market’s collapse attracted a substantial amount of media coverage. While the details of evolving industry structure were rarely the main topic of this coverage, cumulative, it does indicate unambiguously that as of 2013 and 2014, a large number of *small and medium-sized private* coal-mining companies still existed in Inner Mongolia. Indeed, according to managers from the Ordos-based Inner Mongolia Coal Trading Center (内蒙古煤炭交易中心) the privates still made up 85% of the mining companies in Ordos, and Inner Mongolia’s coal industry was still far from achieving the levels of industry concentration that Shanxi’s coal consolidation had achieved (*Futures Daily* 2014, *Securities Daily* 2014). The two former coalmine owners from IMAR I was able to interview also stated that as of 2013, many private mining companies still existed in western IMAR, and that many or even most of the mergers and acquisitions that did take place had been between privates, though selling to state firms, especially centrally-owned ones, could in fact be preferable because of the high prices these could afford

⁷³In fact, Yitai even owned railings of its own, though it also depended on trucking for getting part of its coal to market (*Securities Daily* 2013b).

⁷⁴Coal-sector analyst at a Beijing investment bank (29), economist at a university in Hohhot, IMAR (66), former IMAR coal-mine owner B (81).

⁷⁵A further possibility is that the steepness of the decline in TVM production *reported in this data series* has mainly to do with the vagaries of the IMAR safety inspectorate’s data system. As discussed in Chapter 4, Section 4.2.1, for reasons unknown to me the IMAR safety inspectorate consistently reported significantly lower private (TVM) output than the official Coal Industry Yearbooks (produced by the national-level safety inspectorate) reported for IMAR, at least up to 2011 (The 2012 Yearbook reported no data for IMAR and the 2013 Yearbook has not yet appeared.)

to pay (Interviews 62, 80, 81⁷⁶). Yet while they still existed, the small and medium-sized privates had by 2013 also largely stopped producing, as prices often failed to cover production costs, and many were now trying to sell their mines, but there were few buyers (*CYD* 2014; *Energy* 2013a, 2013b; *Futures Daily* 2014, *Economy & Nation Weekly* 2013, Li 2013, *Securities Daily* 2013a, 2013b, 2014; *Reuters* 2014; Interviews 80, 81⁷⁷). Only the very largest privates had the necessary scale economies and access to railing and bank credit to have some hope of pulling through, and these firms suffered badly, too.⁷⁸

The continued growth of SOE output in 2013 is not inconsistent with privates withdrawing for economic reasons. The SOEs' better access to railing, greater scale economies, and more capital-intensive and therefore fixed-cost-heavy operations well as political imperative to maintain employment, meant that SOEs would often keep producing also after privates had exited the market (Cornot-Gandolphe 2014, *CYD* 2014, *Energy* 2013a, 2013b).

In short, the available information suggests that despite state efforts to orchestrate consolidation in 2011 and 2012, only limited mergers and acquisitions actually took place (otherwise there should no longer have been a significant number of small and medium-scale mining companies around to suffer from the falling coal prices), but significant consolidation and a marked increase in the state sector's share of the industry did start to come about from 2013 on, as market gyrations began forcing many private players to exit.

Why were state efforts to push through mergers and acquisitions (apparently) relatively unsuccessful? What happened, it appears, is that the 2011 announcement by the IMAR government of further policy efforts to consolidate the industry initially created a rush to buy mines and lock in coal reserves, as Western IMAR offered some of China's last large and relatively undeveloped coal fields (recall that coal prices were still rising throughout most of 2011). Large numbers of state and private companies and investors from across China thus poured into Inner Mongolia (especially into Ordos) seeking mines (*China Business* 2012; *China Times* 2011b; *EO* 2011e, 2012). Concurrently, smaller local privates began to search for both attractive buy-out offers and sounded out other smaller local firms about merging or forming alliances among each other, in order to be recognized as "consolidators" and thus avoid shut-down requirements in case no good buy-out deal came through (*China Business* 2012, *Northern Weekend* 2012b).

⁷⁶Former coal mine owners A (62) and B (80, 81) from Inner Mongolia.

⁷⁷Former coal mine owner B (80, 81) from Inner Mongolia.

⁷⁸One indicator of this is the slipping position of the Inner Mongolian coal companies on the annual list of the largest 500 Chinese private companies by revenue (中国民营企业500强榜单), which is compiled by the All-China Federation of Industry and Commerce. In 2011, the list had still included 9 coal companies from Inner Mongolia, and their average ranking was place 275 on the list. In 2014, only seven Inner Mongolian coal companies made the list, and their average ranking had fallen to place 332, with Yitai – in all years the highest-ranked coal company – tumbling from place 28 (2011) to place 77 (2014) (All-China Federation of Industry and Commerce 2012, 2015).

As a result, the prices at which mines were offered for sale shot up. Mines which only a year earlier had still traded at RMB 100 million were now reportedly being sold for RMB 300 or even 500 million (*EO* 2011e).

This in turn obstructed genuine consolidation, because potential acquirers seem to have often been reluctant (or simply struggled) to pay the prices demanded (*China Business* 2012, *Securities Daily* 2014). This is not to say that no mines changed hands. Some certainly did, and for those owners who could realize them, the very high prices mines were trading at certainly provided incentives to sell (Interview 62⁷⁹). For instance, Jizhong Energy (冀中能源), a Hebei coal SOE, bought 51% of a medium-sized private mine for RMB 861.9 mio (*China Times* 2012b), while Shuangxin Resources (双欣资源), a large Inner Mongolian private, paid RMB 1.5 billion for two mid-sized coking coal mines (Haotian 2012). Realized deals also included large privates buying mines from SOEs. Thus private Ximeng, one of IMAR's key coal enterprises, took majority stakes in mines previously owned by a Jiangsu SOE, which was reduced to a minority shareholder (Inner Mongolia Ximeng 2012, Jiangsu Yueda 2013).

The rapidity of the downturn in the coal market in the first half of 2012 seems to have only further dampened appetite for purchasing mines, as potential buyers stepped back to wait for the market and mine prices to reach bottom, or lost interest altogether, even as mine owners became increasingly eager – and in some cases desperate, to sell (*Securities Daily* 2014, *China Times* 2012b, Interviews 80, 81⁸⁰). In turn, the relative disappearance of eager buyers seems to have encouraged smaller local private firms to undertake nominal mergers, and the local authorities to turn a blind eye to them, as this offered a way of accomplishing consolidation (at least on paper) without putting significant financial burdens on the firms (*China Business* 2012; *Northern Weekend* 2012a, 2012b).

5.6.3.3 Policy, Outcomes, and Mining Accidents in Inner Mongolia

Why did IMAR not enforce nationalization? Again, lack of access to IMAR decision makers precludes a definite answer, but the foregoing analysis provides a straightforward and plausible explanation. The costs of doing so would have been high, while the cost of *not* doing so was limited. Effecting nationalization would have been particularly difficult in IMAR, since unlike the other four case-study provinces, IMAR owned no coal SOEs of its own. Shanxi and Henan could order their own SOEs to take over the local mines; IMAR would have had to either set up entirely new firms, or expropriate the existing large local privates and turn them into state-owned entities, or rely on outside SOEs to take over the industry. The former would have been complicated and

⁷⁹Former coalmine owner A from IMAR.

⁸⁰Former coal-mine owners A from IMAR.

likely expensive; the latter would have meant ceding most control over the industry and losing a large portion of fiscal revenues. Either would have created considerable social conflict and economic damage.

Conversely, the political cost of leaving a significant part of the industry under private ownership should have been low. The easy geological conditions found in IMAR meant that the province had one of the best safety performances nationally. Very few accidents of any size in turn meant that the province suffered very little accident-related media coverage. In short, unlike in Shanxi or Henan, in IMAR the private coal sector was not creating any acute problems. Industry participants indeed seem to have perceived these differences. Thus a coal-industry investor from Zhejiang, who had previously been engaged in Shanxi, explained that he and fellow Zhejiangites had bought coal mines in IMAR *even after* the mines they had owned in Shanxi had been nationalized, because in IMAR industry policy had been more stable and they perceived lower political risk, because geology meant that IMAR had much less of an accident problem (which they saw as having motivated the expropriations in Shanxi) (21 CBH 2010f). The same point was made by interviewees: the absence of a significant safety problem in IMAR meant that the province was under much less political pressure than Shanxi and thus had much less incentive no take radical policies like nationalization (Interviews 3, 9, 20, 62, 81).⁸¹

⁸¹ Journalists specialized on energy and environmental topics A (3) and B (9), Chinese energy scholar (20), former coalmine owners A (62) and B (81) from IMAR.

Chapter 6

Conclusion

This concluding chapter summarizes the argument put forward in this dissertation (Section 6.1), and then discusses the larger implications of my findings for three areas of scholarly inquiry; viz. research on policy making and implementation in China (Section 6.2), on the scope for media and public opinion to influence politics (Section 6.3), and studies of China’s “state capitalism” (Section 6.4).

6.1 Summary of the Argument

This study sought to explain the puzzle of rent-destroying change in coal mining in China – why nationalization, which destroyed much of the rent flow that the coal industry had provided to local officials, was implemented in some provinces, but not in others. The answer my findings suggest is that nationalization came about primarily as a response to the safety crisis, which in turn was – in its political dimension – to a large extent generated by media coverage.

Mining safety had been poor throughout the history of the People’s Republic, though since at least 1978 safety had also continuously improved and in the 2000s, in fact, death rates declined especially steeply (cf. Chapter 2, Figure 2.3). Yet even as mines were becoming safer in the 2000s, the rise of commercial media outlets and a qualified willingness of the state to permit coverage of “negative” news like accidents and the associated corruption forced mining accidents onto the political agenda. In particular, they became an issue for that subset of provinces which suffered many large and intensively-covered accidents: Shanxi and Henan.

Accidents of this type were perceived as threats to social stability, on account of their potential to spark “extreme” emotions among the public, erode regime legitimacy and potentially even trigger unrest (Chapter 3). Thus, they ceased to be purely local tragedies but became “sudden incidents” of wider political significance, and mining safety and industrial structure (perceived as the underlying cause of the accidents) were converted from a technical and economic problem into a political problem; that is, one affecting overall regime stability. Provinces therefore came under substantial pressure to improve mining safety and to eliminate the small-scale private coal mines that were at the heart of the accident problem. The subset of provinces with many large accidents received an especially large share of the coverage, and accordingly came under particularly heavy political pressure. Thus it was Shanxi, the province with the greatest large accident/media coverage problem that first adopted measures like tightened safety supervision and “local consolidation” (Chapter 4), and pioneered experiments first with “property rights clarification” (Chapter 4) and then with nationalization (Chapter 5).

This pressure stemming from media coverage of accidents was further reinforced by the operation of the party-state’s disciplinary practices (Chapter 3). Probably on account

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of their stability-threatening properties, officials tended to be sanctioned particularly severely for the occurrence of large accidents, especially if these also drew high levels of media coverage and public attention, a point substantiated empirically through the comparison of disciplinary sanctions meted out to local and provincial officials in Shanxi and Guizhou. Even though Shanxi's objective safety performance was much better than Guizhou's, the prevalence of large, intensively-covered accidents in Shanxi meant, firstly, that far more and far higher-ranking officials were disciplined in Shanxi than in Guizhou (where accidents were smaller – albeit more frequent and thus cumulatively more deadly – and less reported on), and secondly, that the sanctions meted out to the Shanxi officials were also tougher. While lack of comprehensive data means that we cannot be certain, the evidence about how the disciplinary system operates makes it a near certainty that Shanxi officialdom suffered the harshest sanctions of any in the country over accidents. The prevalence of large accidents in Henan and the extensive reporting they too attracted makes it likely that Henanese officials, too, suffered significant disciplinary sanctions over accidents, and probably more than those in any other province except Shanxi.

Yet while escalating media coverage and disciplinary sanctions raised the costs of leaving industry structure unchanged, provinces did not initially resort to nationalization. The rents local officials captured from the private mines were very substantial, and the private mines also supplied other benefits like employment and easier governance (or at least greater local-government control over firm behavior). SOE takeover would imperil this (Chapter 4). While the dominant groups at the Center had called for consolidating the private mines under the large state corporations (Chapter 2), this is not what the provinces initially did. Rather, they took measures that promised to meet the Center's core demands – better mining safety, reduction in the number of small-scale private mines – while preserving the private mining sector and the benefits that it provided. Instead of nationalization, therefore, we see tightened regulatory oversight, state-mandated mergers, upgrading and capacity expansions within the private sector, and even regulatory reforms to improve mine owners' incentives by strengthening their property rights (Chapter 4).

The recurrence of large, intensively-covered mining accidents ultimately tipped the balance towards nationalization in Shanxi and Henan, as provincial and municipal leaders scrambled to find some way of resolving the accident problem (Chapter 5). Nationalization met with sharp resistance from local officials, mine owners, and liberal media outlets and intellectuals. However, continued accidents and central-government support pushed first Shanxi and then Henan to face down this resistance and insist on nationalization. Conversely, in the other case-study provinces the absence of a comparable political crisis over accidents meant that the costs of leaving industry structure largely unchanged were much lower. Unsurprisingly, therefore, no obligatory nationalization was carried out here and the provinces instead continued promoting consolidation, upgrading and capacity expansion among the privates.

So far the tale told in this thesis. I next discuss its implications for several issue areas in Chinese politics. Before diving into the discussion, though, it is important to note that the events analyzed in this thesis largely took place during the Hu-Wen period (2002–2012) and the last years of the Jiang Zemin administration (1989–2002). Under Xi Jinping (in power since 2013) Chinese politics has shifted in dramatic ways that few if any foresaw. The largest purge-cum-anti-corruption campaign since Mao’s times is ongoing and shows no signs of abating. Power has been concentrated with Xi personally to a greater extent than under any post-Mao leader. The norms of collective leadership and factional balancing that, many analysts believed, had been firmly established in Chinese elite politics after 1989 appear to have been jettisoned. The harshest, most comprehensive and sustained crackdown on independent-minded journalists, lawyers and civil-rights activists since 1989 is currently taking place, and far exceeds anything that took place under Jiang or Hu. Finally, the economy is in serious difficulties. How applicable models of Chinese politics developed on the basis of data from the previous 25 years are to the Xi era is therefore quite uncertain.

6.2 Policy Implementation

As noted in Chapter 1, the level of “capacity” that China’s state enjoys remains disputed. While casual observers have often claimed that Chinese leaders “excel at implementation” (e.g. Roach 2014: p. 244), scholars have painted a more uneven picture, in which policies that threaten the political-economic interests of local officials (what I call “rent-destroying policies”) frequently founder, though significant implementational successes are also occasionally reported.

Much research has approached the puzzle of inconsistent policy implementation from one of two perspectives. One is to look at the administrative technology available to the Chinese state to enforce and incentivize implementation, especially the cadre assessment system (e.g. O’Brien and Li 1996, Chan and Gao 2014, Edin 2003, Gao 2010, Mei and Pearson 2014). This perspective explains inconsistent outcomes with the uneven capacity of these systems to monitor the implementation of different kinds of targets and the difficulty they have balancing competing goals. Another approach explains uneven outcomes with the extent to which they overlap with officials’ (pre-existing) interests and incentives. The latter are usually derived from structural variables like bureaucratic organization (Lieberthal and Ocksenberg 1988), economic circumstances (Goebel 2011, Bernstein and Lü 2003), formative leaders’ beliefs (Donaldson 2012), or cadres’ business interests (Smith 2009).

My findings have implications for both of these perspectives. The attention scholars have given to the complex incentives that the cadre assessment system, in particular, produces, is certainly merited. However, my findings suggest that inconsistent outcomes may as often be a question of varying political *will*, as of the characteristics of the monitoring and enforcement technology at leaders’ disposal – whether leaders are willing to

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spend their political capital on enforcing some policy and *use* the powerful bureaucratic tools at their disposal to push through change, not whether they possess adequate enforcement tools. After all, although Shanxi and Henan only moved to nationalization when other measures had failed, once either province had made its determination to insist on nationalization clear, the counties and municipalities had little choice but to fall into line, despite their previously vehement protests. The fundamental reason for this is probably the hierarchical personnel system. As Huang (1996) and Naughton and Yang (2004) have noted, this gives higher levels tremendous power over lower levels at every point in the system, as they can simply remove insubordinate officials. The anti-corruption inspections that Shanxi and Henan launched in parallel to nationalization are testimony to the fearsome panoply of disciplinary powers that higher levels enjoy to bring subordinates to heel.

Yet how might we explain leaders' varying will to enforce policy? This brings us to leaders' interests and incentives. Obviously factors like bureaucratic organization, economic structure or private pecuniary interests will play an important role in shaping these. But explanations focusing on these factors struggle to explain cases where the implemented policy runs counter to the incentives one might reasonably deduce from them. In the coal case, what was arguably *the* key economic factor shaping officials' interests (private mines' generation of rents) disincentivized forceful policy implementation. Yet ultimately it happened. Why?

My findings suggest that concerns over "social stability" (社会稳定, meaning really political stability and regime security) may trump most other factors. In other words, the likelihood that some policy will be implemented forcefully, even at the cost of destroying rents, will rise dramatically if doing so comes to be seen as crucial for dissolving some perceived threat to social (political) stability. This is what seems to have happened with mining accidents and coal-industry restructuring. Since the 1990s central-government policy makers had been eager to consolidate coal mining under the large SOEs for multiple reasons, including stabilizing coal markets, ensuring orderly competition, increasing state control over energy supplies, preventing destructive mining practices that wasted precious coal reserves, and improving environmental protection. Yet none of those concerns were apparently powerful enough to encourage provincial leaders to force such changes onto unwilling local officials and mine owners, and lukewarm SOEs. That only happened once the public and media attention large accidents commanded transformed industry structure (seen as the source of the accidents) into a question of social stability. In fact, a professor I interviewed invoked precisely this kind of framework to explain why Shanxi nationalized the coal mines: mining accidents, he stated, were no longer an "economic problem" but had become a "political problem" (政治问题), meaning a problem that affected political and regime stability, and in China political problems weighed more heavily than economic problems, wherefore more radical measures would be taken to solve them (Interview 72).¹

¹Xi'an economist.

This putative centrality of considerations of social stability to policy making raises several questions for future research. One is what exactly the regime considers to be a serious threat to stability, and what not. Studies of how the state treats various forms of hostile speech acts and online behavior suggest a remarkably differentiated approach to potential threats (King et al. 2013), yet so far we know little about how the state (and its many different constituent parts) think about these issues. A second question is why the state sometimes responds to threats to social stability with action to resolve the underlying problem (like in the coal case), but at other times responds primarily with stepped-up repression. Is this driven primarily by the characteristics of the underlying problem, the presence of elite allies in the state, or the degree to which there are easy solutions to the problem? We do not know.

6.3 Media Coverage, Public Opinion, and Policy

A further implication of my findings is that the roles public opinion and media coverage today play in Chinese politics and policy making deserve much more study. To date, this has mostly received attention from analysts of Chinese foreign policy (e.g. Reilly 2012, Gries 2004, Chen Weiss 2014). Yet foreign policy is of limited concern to most members of the public. Media coverage of foreign affairs is also usually dwarfed by domestic affairs. If public opinion and sensationalist media coverage have been able to affect Chinese foreign policy (as James Reilly and Peter Hayes Gries argue) then they may have shaped more domestic policy domains than just coal-industry policy. Urban air pollution is an obvious policy area in which to look for a role for public opinion and media coverage, but there may well be many others. How for instance has policy towards the construction and real estate industries as well as urban planning been affected by the (widespread) complaints about unaffordable house prices and media and online memes such as people being turned into “mortgage slaves” (房奴)?

Beyond exploring the extent to which public opinion and media coverage have shaped policy in the past, there are three further questions worth addressing in future research: Firstly, through what mechanisms have they done so? Secondly, what consequences for policy making and policy outcomes has a greater role for public opinion and the media had? Thirdly, has the opening that appears to have enabled public opinion and the media to begin influencing policy during the Jiang and especially the Hu-Wen eras come to an end under Xi?

6.3.1 Mechanisms

In my case study, the main mechanism through which media coverage and public opinion affected policy was creating a perception among political leaders that “social stability” was threatened. But maybe there are other mechanisms – for instance, perceptions of public support or even acclamation? Might ambitious politicians play to the public

and the media, hoping that by garnering widespread popularity they can ensure their own promotion or reduce their vulnerability to attacks from rivals? One case where this appears to have happened is Bo Xilai. His high-profile and notably media-savvy crackdown on organized crime – there were even plans for a cinema film starring Bo and his police chief – his revival of Maoist nostalgia and well-publicized social-welfare policies were widely interpreted as a public campaign for a seat on the Standing Committee (e.g. Johnson 2012). In other words, his policies as provincial party secretary in Chongqing appear to have been shaped by efforts to court popularity and get public attention.

6.3.2 Consequences and Crackdowns

What consequences has the (apparently) increased scope for media and public opinion to influence policy making had? One possibility is that it is leading to better governance, as a wider range of problems makes it onto the government agenda and policy makers learn to use public opinion to overcome vested but destructive interests. In his study of how coalitions of rural citizens, NGOs, journalists, and supportive officials blocked several hydro-power projects, Andy Mertha (2008) argues for this benign scenario. Air pollution may present another case of this kind. Van de Ven (2014) argues that celebrity social-media commentators were instrumental in pushing urban air pollution onto the government agenda.

But another possibility is that a growing scope for public opinion and the media to influence policy has primarily served to make Chinese politics more volatile and unstable, and increased the degree to which the regime feels under threat, but without leading to a meaningful increase in the number of cases where change running counter to the dominant political and business interests actually takes place. The amorphous, episodic and unorganized nature of public opinion, the forbidding political opportunity structure that collective action faces, and the state's success at preventing the growth of independent social institutions mean that it is very hard to generate the sustained political pressure necessary to drive changes contrary to the dominant bureaucratic and business interests. Arguably, in the two cases where public opinion and media coverage seem to have made the greatest difference to policy outcomes – mining accidents and air pollution – the ultimate source of pressure was not organized efforts of activist journalists or Weibo commentator working to keep these topics in the public eye, but recalcitrant environmental circumstances – unsafe mines and industrial emissions – that ensured that a problem which was fundamentally hard to overlook (big accidents, smog) kept cropping up again and again. Yet cases like this are likely to be rare.

Instead of driving sustained improvements in governance, the main consequence of greater scope for public opinion and media coverage to impact politics and policy may therefore be to make Chinese politics and policy more *volatile* – more subject to abrupt (albeit temporary) shifts as some event creates a sudden outpouring of media and social-media commentary and mobilization by activists, and the state feels forced to quickly

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respond to quieten down popular feelings – but also free to return to its prior course once public attention has moved on. Reilly (2012) in effect argues that this has happened with foreign policy, but takes an optimistic view of Chinese officials' ability to manage episodic outbursts of public opinion while keeping policy on track. He believes that officials have learnt to respond to outpourings of nationalist fervor in response to some sudden event by temporarily permitting activists leeway to express their feelings and indulging them with belligerent rhetoric, while patching up damaged diplomatic relations behind the scenes and reigning activists in again once the first steam has been let off. However, recent empirical work by Gries et al. (2016) has challenged Reilly's optimism about the state's ability to manage the expression of popular nationalist fervor, arguing that it has repeatedly proven capable of driving policy, at least temporarily. Thus in 2012/2013, Gries et al. claim, nationalist mobilization by Chinese internet users pushed the state into diplomatic and military escalation vis-à-vis Japan that it had had no intention of entering into.

The ferociousness of the Xi administration's crackdown on all forms of civil society activism, including journalists and celebrity commentators on social media, also belies the notion that this is a regime confident of its ability to neutralize the power of unleashed public opinion movements through skillful manipulation as James Reilly believes. The crackdown suggests instead that the party elites currently in command are deeply fearful about the consequences of continuing to tolerate the level of opening that came about in the 1990s and 2000s. In the past, at least sections of the political elite believed that a controlled opening to greater "public opinion supervision" by the media and the public at large could strengthen the state by improving governance and policy. Evidently, this view no longer holds sway in Beijing.

What the full consequences of this will be, though, is harder to say. It is possible that the apparent entry of the media and public opinion into policy making in the 2000s will prove a brief interlude. However, even during the most liberal periods of the 2000s, critical journalism and media-enabled mobilization of public opinion depended as much if not more on skillful issue framing, the exploitation of regulatory loopholes, and the scope of technological and business innovations to outpace state control, as on deliberate state toleration. The considerable skill at playing these games of "edge ball" (打擦边球) that the large number of "advocacy professionals" (Hassid 2011) among China's journalists and ordinary citizens pushed into contentious politics have developed, mean that Xi's push to silence them may prove harder than expected. While 2015 saw instances of deafening media silence during events that previously would have prompted aggressive coverage, there were also instances of much bolder reporting. In June, the *Oriental Star* cruise ship capsized during a storm on the Yangtze, killing 442 passengers, most of whom were Chinese holiday-makers. This incident was similar to the 2011 Wenzhou train disaster, but while the latter triggered aggressive and "tumultuous" coverage, in the case of the *Oriental star* disaster, the state was able to effectively muzzle the media (Bandurski 2015). Yet when a logistics company's storage facility with hazardous chemicals caused a massive explosion close to middle-class residential

areas in Tianjin in August (173 fatalities) the media were able to circumvent state bans, uncovering and reporting aggressively on the corruption and regulatory violations that lay behind the accident, the company's ties to Tianjin officials and a major SOE, and the way that the use of untrained irregular fire-fighters had resulted in numerous unnecessary deaths (Han 2015). At least in some circumstances the media evidently was still able and willing to play a watchdog role. While future technological innovation may increasingly serve the state's effort to control expression, it may also continue to open up new spaces for this. Whatever the final outcome, though, the evolving role of the media and public opinion in policy making and implementation in China deserve more attention going forward.

6.4 “State Capitalism” and Guo Jin Min Tui

In recent years, China's state-owned sector has received renewed attention. While it was long assumed that these firms would either be privatized or simply outcompeted by privates and gradually fade, it is now recognized that the dominant groups in China's leadership never intended to let either of these things come to pass. Rather, they have sought to preserve state ownership of key industries and firms. As a consequence, SOEs continue to make up a substantial share of many industries in China, in particular of many strategic upstream and manufacturing industries (e.g. mining, energy, metals, autos, machinery) (Ernst and Naughton 2007, Naughton 2014, Li et al. 2015). The term “state capitalism” has come into currency to describe this phenomenon (e.g. Naughton and Tsai 2014, Eaton 2015, Lin and Milhaupt 2013, Liebman and Milhaupt 2015). What larger insights about this can be gleaned from the coal case? I believe there are two. The first concerns the *Guo Jin Min Tui* phenomenon (systematic crowding-out of private firms from some industry by state firms). The second concerns questions for future research on China's “state capitalism”.

6.4.1 Guo Jin Min Tui

The Shanxi coal nationalizations and the high-profile nationalization of several steel firms in 2008–2010, as well as the general bias towards state companies in the allocation of stimulus funding in 2009/2010 led to an excited debate in China – picked up also by the Western media – about *Guo Jin Min Tui*, the apparent crowding out of private firms by SOEs. To what extent that really happened remains debated, though it appears that, except for the coal industry, in fact little real crowding-out occurred (Lardy 2014). Insights from the coal case suggest why this was so, and indicate that in the future, too, we should only expect *Guo Jin Min Tui* under very specific and relatively rare conditions.

Crowding out of privates (or some other set of firms) from an industry can in principle occur through either of two mechanisms: firstly, administrative fiat (i.e., forced

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takeovers or closures), and secondly rigged market competition. The coal case suggests that either faces steep barriers and is therefore generally unlikely to occur, but under certain conditions they do become substantially more likely.

6.4.1.1 Administrative Fiat

The coal case suggests that unless one of two conditions is met, it is very hard for the state to expand the share of state ownership of a given industry through administrative means like forced takeovers or closures of private firms, at least as long as the privates are profitable enough to deliver rents and other benefits (employment, GDP) to local officials. The reason for this is that nationalization will face intense resistance not only from the expropriated privates themselves, but also – indeed especially – from local and possibly provincial officials, whose access to rents and other benefits will be threatened if the economic assets in question (firms, plant, mines, etc.) come to be controlled by SOEs with bureaucratic rank and power equal or greater than the officials’.

The role of rents in this argument alerts us to the first condition under which the expansion of state ownership should become easier and thus more likely. If secular economic change wipes out the rents in question and endangers other benefits (e.g. local employment due to impending bankruptcies), local officials may become much less opposed to some form of state takeover, and even welcome it. The “special circumstances” of the coal nationalizations alert us to the second condition making nationalization or closure of privates more likely. This is if the privates come to be perceived as imperiling political stability, for instance by creating some kind of highly visible problem that embarrasses the state or sparks public anger. If stability considerations really do tend to trump most other considerations (as my findings from the coal case suggest), then we should expect to see central or provincial authorities override local resistance under these circumstances and enforce *Guo Jin, Min Tui*.

6.4.1.2 Rigged Market Competition

Crowding out of private firms might also be effected by quietly shifting factors of market competition in state firms’ favor, e.g. by supplying them with preferential access to strategic inputs like credit. As we saw in the discussion of the effects of the post-2012 coal-market collapse on producers in Inner Mongolia, the preferential allocation of railings to state firms seems to have given them a competitive advantage over privates. However, this strategy depends for its feasibility on a specific condition: that those state agencies wishing to favor state firms possess *specific, relevant* regulatory powers enabling them to grant or withhold whatever happens to be the key bottleneck input in question. Given the extreme heterogeneity of factors affecting firm competitiveness in different industries and the highly decentralized character of China’s economy and economic governance, it is likely that this condition often does not hold. Moreover,

as the well-attested phenomenon of “local protectionism” (地方保护主义) indicates, local governments may often be able to answer central-state regulatory discrimination against ‘their’ (private) firms in kind, or find some new way of supplying the needed input.

In summary, the coal case suggests that for *Guo Jin Min Tui* to occur, it is necessary for one of three conditions to hold: a political crisis tied to the private sector in the industry in question, a steep market downturn wiping out the rents that the sector generates, or control of a vital input by state agencies eager to promote *Guo Jin Min Tui*. However, none of these are likely to hold very often, and thus *Guo Jin Min Tui* is will probably remain a rare phenomenon.

6.4.2 Future Research on China’s “state capitalism”

The coal case suggests several areas for future research on the dynamics of China’s “state capitalism”. One concerns the interactions between local (subprovincial) governments and central and provincial SOEs. In the coal case, these emerged as fundamental for understanding how consolidation played out, as they motivated local officials to oppose nationalization. Given that local officials and large state enterprises are two of the most powerful and resource-rich sets of actors in China’s political economy, it seems likely that their interactions shape outcomes in many other areas. Yet we know very little about these. For instance, in the coal case (and the other cases of industry restructuring discussed above), their relations seem to have been largely hostile. But this may well *not* be norm outside of a relatively specific and unusual circumstance: where efforts are underway to remove *existing* assets (firms, plant, natural resources) from local governments’ control and give them to the SOEs. After all, the large SOEs can also offer local officials a lot – above all large investment projects that drive GDP. Further research about how local officials and provincial and central-state SOEs interact to shape economic and social outcomes therefore seems worthwhile.

A further area for future research are the provincially-owned state companies. Most research on China’s state sector in the last 10 years has focused on the 120-odd central-state SOEs (央企). There are good reasons for this, since they are the largest and most powerful corporate actors in China. However, much of the state sector in fact continues to be owned by local and provincial governments. As the coal case shows, these firms can be important tools through which provinces conduct policy. Shanxi and Henan were ultimately able to resolve the safety crisis by simply ordering their SOEs to take over and run the mines in question. During my research, I repeatedly came across references to provinces and localities using their own state firms for all kinds of purposes, from stimulating investment, to developing entirely new industries (e.g. coal chemicals, tourism), to rewarding followers with plum appointments. Yet despite their putative importance to provincial economic policy and probably to provincial politics

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as well, we know very little about the provincial state sectors. It is to be hoped that this will change in future.

Chapter 7

Appendix

7.1 Distortions in the Data on Coal-Mine Output

The data are prone to at least three kinds of distortions. One is underreporting by firms, to evade taxes or disguise illegal mining or production above registered capacity. Based on comparisons between reported coal consumption, production and imports, Kevin Tu (2011: pp. 57–65) estimates that even in the late 2000s, 15–20% of produced coal was never declared or entered into the statistical system. Tu believes that TVMs account for most of this “grey-market” coal, but much of it may in fact have stemmed from the large SOEs. A former manager of one of the largest Chinese coal companies told me that in his experience, the company routinely mined and sold significantly more coal than it declared (Interviews 37, 84). Large centrally-owned mines (央企) may today be best able to evade the provincial coal registration (票) system, as they possess own railway track and sales and transport companies over which provincial regulators have little control.

The second source of problems are data-collection errors. The coal-industry yearbooks mostly report provincial output data in two separate places; a table recording output by mine type for all provinces (probably based on centrally-collected data), and in chapters authored by provincial authorities that record the yearly events in their respective coal industries (using provincial data). Inconsistencies between the number reported in these two places are frequent. In one particularly egregious case, the same provincial chapter reported totally different output numbers in the chapter text and in a table at the end of the chapter. Later yearbook editions often report revised output figures for earlier years. For all figures showing provincial output, I have used the data reported in the national table and only draw on the data from the provincial chapters when no national table was published. In all cases the latest published data is used (i.e., if 2003 output data was published in 2003 and re-published in 2005, the 2005 version was used).

Thirdly, there are instances of data falsification by state authorities for political ends. One example of this is underreporting of TVM output, as happened on a large scale between 1998 and 2002. A more subtle form of data falsification is the invention of opaque new categories, like the “local mines” category discussed in Chapter 4.

7.2 Inner Mongolia’s Key Coal-Mining Enterprises

7.2.1 State-owned Firms

- China Shenhua Energy Shareholding Company – Shendong Coal Branch Company
(中国神华能源股份有限公司神东煤炭分公司)

- Huaneng Group Yimin Coal and Electricity Company (华能集团伊敏煤电有限责任公司)
- Inner Mongolia Baiyin Huahaizhou Opencast Coal Mining Company (内蒙古白音华海州露天煤矿有限公司)
- Inner Mongolia Huolinhe Coal Industry Group (内蒙古霍林河煤业集团)
- Inner Mongolia Luneng Daya Energy Group (内蒙古鲁能大雁能源集团)
- Inner Mongolia Pingzhuang Coal Industry Group (内蒙古平庄煤业集团)
- Shenhua Group Baotou Mining Company (神华集团包头矿业有限责任公司)
- Shenhua Beidian Shengli Energy Company (神华北电胜利能源有限公司)
- Shenhua Group Haibowan Mining Company (神华集团海勃湾矿业有限责任公司)
- Shenhua Group Wuda Mining Company (神华集团乌达矿业有限责任公司)
- Shenhua Zhunbei'er Energy Company (神华准格尔能源有限责任公司)
- Shendong Tianlong Group (神东天隆集团)
- Zhalaino'er Mining Company (扎赉诺尔煤业有限责任公司)
- Shenhua Baori Xilei Energy Company (神华宝日希勒能源有限)

7.2.2 Private Firms

- Inner Mongolia Haishen Coal Group (内蒙古海神煤炭集团)
- Inner Mongolia Huineng Coal and Electricity Group (内蒙古汇能煤电集团)
- Inner Mongolia Manshi Coal Group (内蒙古满世煤炭集团)
- Inner Mongolia Mengfa Coal Company (内蒙古蒙发煤炭有限责任公司)
- Inner Mongolia Mengtai Coal and Electricity Group (内蒙古蒙泰煤电集团)
- Inner Mongolia Qinghua Group (内蒙古庆华集团)
- Inner Mongolia Qipanjing Mining Company (内蒙古棋盘井矿业有限责任公司)

- Inner Mongolia Taixi Group (内蒙古太西煤集团)
- Inner Mongolia Tehong Coal and Electricity Group (内蒙古特弘煤电集团)
- Inner Mongolia Ximeng Coal Company (内蒙古西蒙煤炭有限责任公司)
- Inner Mongolia Yidong Coal Group (内蒙古伊东煤炭集团)
- Inner Mongolia Yitai Group (内蒙古伊泰集团)
- Ordos Wulan Coal Group (鄂尔多斯市乌兰煤炭集团)
- Ordos Ruide Coal and Chemicals Company (鄂尔多斯市瑞德煤化有限责任公司)

7.2.3 No Information on Ownership Obtainable

- Baotou City Luhe Coking Coal Sales and Transport Company (包头市陆合煤焦运销有限责任公司)

Source: Inner Mongolia Autonomous Region Science and Technology Bureau 2010

7.3 Authorized Consolidators in Wuhai City

7.3.1 State-owned Firms

- Inner Mongolia Yihua Group (内蒙宜化集团)

7.3.2 Private Firms

- Haotian Energy Group (昊天能源集团)
- Hongye International Investment Group (弘业国际投资集团)

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- Inner Mongolia Desheng Industry and Commerce Group (内蒙古德晟实业集团)
- Inner Mongolia Hengyecheng Youji Gui Company (内蒙古恒业成有机硅有限公司)
- Inner Mongolia Huanghe Industry and Trading Group (内蒙古黄河工贸集团)
- Inner Mongolia Energy and Chemicals Shareholding Company (内蒙古君正能源化工股份有限公司)
- Inner Mongolia Meifang Energy Company (内蒙古美方能源有限公司)
- Inner Mongolia Tianyu Innovation and Investment Group (内蒙古天宇创新投资集团)
- Inner Mongolia Yuanhengfeng Energy and Chemicals Company (内蒙古远亨峰能源化工有限公司)
- Inner Mongolia Yuantong Coal and Chemicals Group (内蒙古源通煤化集团)
- Wuhai Taihe Coal and Coking Company (乌海市泰和煤焦化公司)
- Wuhai Zhonglian Chemcials Company (乌海中联化工有限公司)
- Wuhai Yifeng Industry and Trading Company (乌海懿峰工贸有限公司)

7.3.3 No Information on Ownership Obtainable

- Wuhai Xibu Mining Company (乌海市西部矿业有限公司)
- Wuhai Chemicals Shareholding Company (乌海化工股份有限公司)
- Wuhai Rongxin Coal and Coking Company (乌海市榕鑫煤焦化公司)
- Wuhai Zhengwei Mining Company (乌海市正威矿业有限责任公司)

Source: Wuhai 2011

Chapter 8

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