

# Truncated Decision Making and Deliberative Implementation: A Time-Based Policy Process Model for Transitional China

Lan Xue and Jing Zhao 

---

*The time dimension has not attracted enough attention in policy process research in China, yet speed is the most distinctive feature of China's recent development. This article, based on observations of China's policy practices, proposes a new research perspective for understanding how the Chinese government has been able to address policy challenges in an era of rapid transition. The approach adopted by the government allows decision makers to respond quickly to serious problems with a truncated decision-making process, and then implement the decisions through a more gradual deliberative process. The article examines China's coal-mining industry reform as an empirical case to illustrate how this governance approach has been used to achieve major policy reform, namely property rights reform for coal mines, while simultaneously maintaining stability, regulating production safety, and stimulating industrial development. The article concludes with a discussion of the broad implications of this pattern for improving the effectiveness of public policy both in and outside China.*

---

**KEY WORDS:** government innovation, public policy process, policy implementation, coal-mining industry reform

时间维度在中国的政策过程研究中并没有引起足够的重视，但速度正是中国近期发展的最显著特征。本文基于对中国政策实践的观察，提出了一个新的研究视角来了解中国政府如何应对快速转型时期的政策挑战。中国政府采取删筒式的决策模式，然后以更加渐进的协商过程来推行该决策，这种“决策删筒-执行协商”的政策过程模式使得决策者能够快速应对层出不穷的严重问题。本文将中国煤矿业改革作为实证案例，来说明这种政策过程的治理方法是如何在保持社会稳定、规制生产安全以及促进产业发展的前提下用于实现快速的重大政策改革，即煤矿产权改革。文章最后讨论了这种模式对提高中国境内外公共政策有效性的更广泛意义。

---

## Introduction

Having experienced a typical compressed development over the past few decades, China began to encounter many unique policy challenges, such as the double burdens of industrialization and de-industrialization in various fields (Whittaker, Zhu, Sturgeon, Tsai, & Okita, 2010). The coexistence of rapid industrialization and socioeconomic development has raised public expectations

and induced many policy dilemmas. For example, while the exponential growth of the housing industry has generated many new jobs and revenues for local governments, it has also generated many complaints and resentment since few ordinary citizens in major cities can afford to buy a new home due to skyrocketing housing prices in these cities.

Indeed, very recently, the Chinese government has rapidly rolled out some major reforms, such as national health-care reform, energy conservation, and air pollution controls. Although the outcomes of these reforms have not necessarily been optimal and various slippages in implementation did occur, the timely fashion in which the government responded to these issues temporarily met the public's expectations, such as publishing the air pollution policy and targeting the response to citizens who complained about the widespread haze in China. Further, these reforms have not generated huge mistakes, which are often associated with hasty decisions. Observers may wonder how the government managed to achieve this. What factors allow the Chinese government to address various policy challenges without falling into the traps of bargaining or procrastination? Will these strategies be enough for the Chinese government to confront the ever-increasing policy challenges of the future?

After a careful examination of cases of Chinese public policy processes, we have concluded that an interesting policy behavior pattern, "truncated decision making and deliberative implementation (TDDI)," has played a critical role. Unlike the normal policy process where the decision is made after a process of analysis and deliberation, the policy behavior we observe follows a pattern in which the decision-making process is compressed and some normal deliberation steps are even skipped, yet the implementation process is quite flexible and allows further deliberation and adjustment. This is different from crisis decisions in emergency scenarios, where the objective of the decision is focused on stopping the crisis and implementation is almost automatic and immediate. This process also differs from policy experimentation through with trials and errors, where the policy experiment is often designed *ex ante* with various implementation options. The purpose of the experiment is to learn about the merits of various policy options. Lessons learned from the process can then be diffused to a broader context.

Is the policy behavior pattern we found a conscious strategy of Chinese decision makers, given the various constraints they face? What are the conditions that may have facilitated the adoption of this strategy? What are the pitfalls and limitations of this strategy? In this article, we hope to answer these questions and capture the underlying dynamics of China's policy process through the policy model of TDDI. Although the model's setup is grounded in the specific features of contemporary Chinese politics, the theory behind the model may be of greater interest to policy process studies. Learning about the style of Chinese public policy making can contribute to a better understanding of alternative public policy processes in many transitional countries that face similarly complex decisions and comparable difficulties in policy making and implementation.

## The Policy Process and Governance in Transitional China

### *Current Research on the Policy Process in China—Why Time Is Not in the Picture*

In traditional public policy process models, time is often an abstract concept rather than a research variable. The stage model focuses on the steps and sequence of steps in the policy process (Lasswell, 1956; Sabatier & Weible, 2014), which allows for complete elasticity and flexibility regarding time. The punctuation equilibrium model shows the change and diversity of agendas over time and pays great attention to information that appears during the periods in which significant policy changes occur (Baumgartner & Jones, 1991; Jones, 1994). The disproportionate focus on these periods involves analysis of the information's content but not of the timing when it emerges (Baumgartner et al., 2009; Chan & Zhao, 2016; Eissler, Russell, & Jones, 2014; Jones & Baumgartner, 2005; Pump, 2011). The advocacy coalition framework models changes in a coalition's policy beliefs over a long span of historical time (or policy cycle) and then seeks to explain the policy changes caused by policy-oriented learning or by external events (Mintrom & Vergari, 1996; Sabatier, 1988). As such, the timing of events is not treated as a crucial factor, serving as an external qualifying dimension. Compared with other models, the multiple streams model pays more attention to the time factor (Kingdon, 1995), but focuses mainly on the significance of particular points in time when various streams of influence converge and policy windows open.

Several early studies on policy process (Lindblom, 1959, 1979; Simon, 1983) used terms such as "muddling through" and "bounded rationality" to contrast the usual policymaking methods and the reality of limited capacity public officials face in processing complex information. The officials' attention is directed at simple, incremental evaluations and feasible responses to short-term pressures, resulting in some important alternatives being neglected due to limited search capabilities and the need to adjust goals frequently in response to changing conditions and new information.<sup>1</sup> However, it was generally accepted that decision makers could still arrive at policy choices through certain stages of deliberation, such as analyzing and comparing alternatives and making trade-offs. In fact, when faced with an emergency or a challenge involving strong social or political pressure, policymakers often have no time to generate alternatives and make comparisons. The decision-making process in such cases tends to be distorted, truncated, and simplified. These studies, however, are exceptions. The mainstream of policy process studies is concerned mainly with the special policy significance of a particular time period but does not treat time as a general variable.

Research on China's policy process, which has gained momentum over the past 10 years, has generally followed the mainstream tradition discussed previously.<sup>2</sup> Different from earlier China studies in which the focus was the politics inside the Party system, this new line of research focuses on major reform and governance policies made at the national and local government levels. Most of the work to date

has taken an institutional angle, which involves analyzing various players' roles and interactions.

Some classical policy models were used by international and Chinese scholars to understand the policy reforms and economic rise of China, such as fragmented authoritarianism 2.0 (Mertha, 2009), adaptive governance (Heilmann & Perry, 2011), policy experimentation (2008b; Cai & Treisman, 2009; Heilmann, 2008a, 2008b; Rithmire, 2014), and planning mechanisms (Heilmann & Melton, 2013; Heilmann, Shih, & Hofem, 2013). Meanwhile, many Chinese scholars have also proposed and developed indigenous frameworks or theories that have helped us grasp the key dynamics and complex features of the agenda-setting process (Wang, 2008), consensus building (Chen, Zhao, & Xue, 2010; Wang & Fan, 2013), formal institutions (Zhou, Lian, Ortolano, & Ye, 2013), policy actors (Zheng, de Jong, & Koppenjan, 2010; Zhu, 2009; Zhu & Xue, 2007), and diffusion and learning (Wang, 2009; Zhu, 2014; Zhu & Zhang, 2016). These indigenous studies have gradually opened *the black box* of China's policymaking and revealed more distinctive features of policy process and policy shifts in transitional China (Ma & Lin, 2012). Taken together, the classical models and the emerging ones have shed light on current policy processes, key actors, and mechanisms or patterns in China's policymaking and governance.

The great expansion of empirical and theoretical research has revealed that China's policymaking is not simply an authoritarian regime devoid of public debate and deliberation, but a complex process that allows for bottom-up input, negotiation, and bargaining from social elites or the public, and has developed procedures for consensus building among departments or subgovernments. For instance, Heilmann and Perry (2011) propose that "...China's vast and bureaucratically fragmented political system is animated by policy processes that allow for far greater bottom-up input than would be predicted from its formal structures." In addition, along with pluralistic institutional information channels that have emerged in China's policy process, policy changes have also accelerated in recent years compared to the 1990s, especially in some pivotal reform areas. The institutional angle alone cannot explain the dynamics of this new phenomenon; the time dimension seems to be a promising area worthy of further exploration.

The reason the time dimension could be a new important investigative channel is that, amid China's economic reform, the country's public policy system is also experiencing changes in both institutional and procedural dimensions. On the one hand, a major part of China's public administration reform in recent years has been to optimize the institutional structure of the bureaucracy and rationalize the bureaucratic policymaking process (Xue & Zhong, 2012). This means that, compared with the policy environments of Western countries, China's policy environment is less rigid, and decision makers have more latitude in maneuvering among various stages of the policy process. China's rich policy practices offer us an opportunity to engage in empirical observations. On the other hand, the social environment in China has become increasingly more impatient and requires decision makers to act faster, which has reshaped Chinese policymaking. The Chinese Government has become increasingly resilient and more open to claims from society (Ma, 2012). For

instance, recent comparative political studies have shown that China, often considered an authoritarian regime, has a political accountability and responsiveness of its own, one that is even comparable to that of democratic regimes, especially when it confronts society's problems and citizens' requests (Chen, Pan, & Xu, 2016; Distelhorst & Hou, 2017).

### *Governance Challenges and the Responsiveness of China's Government*

China's political environment has changed dramatically over the past 40 years. Chinese society has become much more open, a shift that has fundamentally changed the nature of the public policy process. Public policy processes, no longer bureaucratic games among various government agencies, attract more involvement from various nonstate actors, including experts and NGOs (Zhu, 2008, 2009, 2011), and aim at outcomes based on underlying consensus building (Chen et al., 2010; Zhao, 2008). Meanwhile, the Chinese public has become much more vocal in expressing its views on policy issues, and more active in response when their interests are violated (Ma, 2012). Extreme cases of such expression are the social unrest movements that have become headaches for local government officials. Such social unrest not only threatens social stability, but also damages China's international image, which the government cares about very much. These concerns push the sensitive government to focus on means to modify its policies, thus creating an institutional background for the specific form of policy process that is currently emerging.

First, a rapidly changing social environment increases the demand for policy responsiveness. Many complex policy issues have emerged in the age of globalization and rapid technological development confronting policymakers in every country. These policy issues have a high degree of urgency, uncertainty, and impact. Therefore, the process of policy reform for many countries has become "a race against time" to build sufficient competitive advantages for the future. For China, policy reform has recently entered into a watershed period, when fundamental and institutional reforms are needed together with incremental policy changes. Transformative-type governance rather than protective-type governance is called for to continue healthy economic and social development (Heilmann & Perry, 2011). Many challenges arising from compressed development must be tackled in response to rapidly increasing public demands. Mismatches between the new market conditions and the old policy regime must be narrowed, especially in policy areas such as health care, education, and real estate. Furthermore, with new life styles and post-industrial social demands spreading to China, citizens with an unrealistic image of foreign socioeconomic conditions have more negative evaluations of China and the country's governance system (Huang, 2015). Citizens' policy awareness significantly drives their policy demands (Lü, 2013).

The second change facing China is increased accountability, combined with the decreased authority of the government (Chan & Rosenbloom, 2010; Chen et al., 2016; Cheung & Leung, 2007). China's governance style has gradually changed to a more consultative and less top-down approach over the past 10 years. At the same time,

a strict accountability system has been established since the SARS epidemic (Cai & Zhu, 2013; Hsu, 2009; Ma, 2012). The accountability system forces political leaders or bureaucrats to respond quickly to resolve existing problems, or they may be held accountable and lose their positions. This has led to a dilemma for many officials facing emergent situations. On the one hand, they should consult with various stakeholders before making decisions. On the other hand, the accountability system requires them to act quickly, even if they do not have enough resources and information to make careful decisions.

The third change in China is the double-layer policy response system in which local governments serve as a middle layer of the administration between the central government and the public. The central government has also become more active in recent years to please the public instead of staying aloof as the supreme power of the country (Cai, 2008). This change in attitude has provided incentives for ordinary citizens to appeal directly to upper-level government officials, who must respond quickly. Additionally, different levels of government may have to respond to different sets of stakeholders and actors. Although the tendency of the Chinese government is to gradually broaden public engagement in the decision-making process, with an emphasis on experts' participation, there are still many interest groups that can only be involved in the policy implementation stage. Thus, the lower governments more often respond to special or local interests within their jurisdictions, and the upper government responds mainly to broader public or national interests.

### *A New Understanding of Flexible Policy Implementation*

A state facing increasing social challenges and policy issues must have an effective governance mechanism to maintain social stability. Plenty of field studies, or China studies, have attempted to explain China's governance system and its reform experience (e.g., Cai & Treisman, 2006; Huang, 1996; Su & Yang, 2000; Xu, 2011; Xue & Zhong, 2012; Zhou et al., 2013). Many scholars agree that the Chinese government, the bureaucracy, and the Chinese Communist Party (CCP) have sufficient adaptability and resilience (Heilmann & Perry, 2011; Shih, Adolph, & Liu, 2012) to actively absorb information from citizens or the local government. The scholars cited above emphasize that encouraging diverse and flexible responses to policy challenges is key to explaining the agility of Chinese policymakers. Based on long-term observations of the political structure and practical governance process in China, these studies find that the combination of a flexible policy implementation process and strict policy enactment is a key factor that has contributed to ensuring the Chinese government's strong performance in recent years.<sup>3</sup>

Various scholars have emphasized that flexible policy implementation involves policy experimentation and local discretion. Practical experimentation, on the one hand, is the secret ingredient in China's economic rise, as practical experimentation reduces the uncertainties of policy reform (Heilmann, 2008b; Wang, 2009; Xu, 2011). China's dependence on an experimentation-based policy process reduces the uncertainties of policy reform by applying bottom-up initiatives and local knowledge in



the development of national policies. The central government can revise its policies based on feedback from localities or citizens. On the other hand, local administrators play a pivotal role in the process of experimentation, learning, and adaptation. It is important to note that China's style of multiregional governance is suitable for small-scale experimentation (Qian, Roland, & Xu, 2006). In this system, local governments enjoy guaranteed autonomy over their activities (Huang, 2013; Kostka & Hobbs, 2012; Zhao, Chen, & Xue, 2013; Zhou et al., 2013) and engage in a regional competition for economic development in a performance-based promotion system (Cai & Treisman, 2006, 2009; Zhu, 2014; Zuo, 2015).

However, scholars cannot dismiss the reality that China has a strong capability for policy enactment. Instead of relying solely on trial and error or spontaneous policy diffusion, the central authority contributes the effectiveness of local experiments (Heilmann, 2008b). Mandatory policy diffusion, as well as championship policy diffusion, has coexisted in China's public services reform, which has been facilitated by the superior government's administrative commands (Zhu, 2014). Mei and Liu (2014) propose that China's policymakers can make policies consciously and encourage or initiate multiple, small-scale experiments that will be translated into incremental policy changes, rather than actually designing them. Some studies have also indicated that the Chinese Communist Party (CCP)'s control is very important for the success of China's governance mechanisms and for maintaining a strong policy enactment capability for the government (Chöng & Chung, 2000).

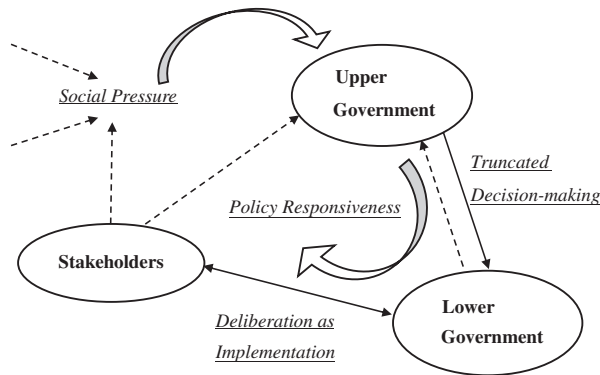
China's flexible policy implementation is depicted as a deliberate design by the central government, which might have been true in the past, but has certainly changed in light of our discussion in this article. In many cases, the central government does not have the luxury of proactively designing the policy process but must respond to various emergencies and pressures. It is in this regard that our analysis of flexible policy implementation for governments under pressure provides a new understanding of the government's behavior in designing and implementing public policy in China.

### **Time Allocation Pattern: TDDI**

In the face of abundant governance problems, China has spontaneously developed a policy behavior that tries to reallocate time among different stages of policy processes in response to the changing policy environment. We argue that this pattern offers certain advantages for the governance process at China's present stage of development. The pattern allows for the rapid delivery of information, effective policy responsiveness, and a balance of interests among conflicting parties.

#### *Allocating Time for Different Stages of China's Policy Process*

The policy process pattern operates as follows (see Figure 1). First, significant social pressures are easily applied to the upper government<sup>4</sup> or to the primary political leaders as a consequence of changes in the policy environment discussed



**Figure 1.** The Mechanism of Time Frame Allocation for the Policymaking Process.

previously. Second, in the face of these social pressures, the upper government has to simplify and truncate the decision-making process to deliver a policy response quickly. A more careful analysis and comparison of alternatives is often omitted to save time. Such a policy response is often generic and vague in its details. Third, the upper government pushes the lower government to fill in the details during the implementation stage and allows sufficient time and scope for flexibility in the implementation process. We call this process “implementation as deliberation,” that can serve as a compensation mechanism to overcome the shortcomings of quick policy decisions. Overall, the process mediates the interests of stakeholders, and allows a certain degree of flexibility. The outcomes of the process depend on the capability of lower government officials, the degree of truncation in upper-level decision making, and the quality of participation by relevant local stakeholders.

#### *Societal Pressure Faced by Upper Government or Political Leaders*

Due to the lack of institutionalized channels for information gathering, bad news, including those that the lower government could not cover or deal with, are often translated into social pressure to the upper government first, instead of to the lower government. After receiving such information and pressure, the upper government must respond to avoid the erosion of political stability.

Where, however, does the social pressure come from, and why is the extent of social pressure in China so great? One source is external pressures from the international community over domestic governance issues in China. After joining the World Trade Organization (WTO) in 2001, China was asked to implement the international standards and international treaties regarding human rights, environmental protection, and industrial development. How China can deal with these problems is beneath the concern of other partner countries. The second reason is that, as in other countries, the rise of the Internet and of information disclosure has enabled a major increase in citizens’ demands for policy transparency and participation. The difference between China and the advanced democracies regarding these demands is that



many other countries have much more prior experience in dealing with popular demands from the public.

Why is this social pressure transferred to the central government? Few informal information-gathering institutions exist that regularly collect information to deal with social pressure. There is also no rotation between political parties to buffer the responsibility for social problems. In this situation, once social pressure appears in China, it will be transmitted directly to the central government or top leaders. Why must the leaders respond to this social pressure? The reason lies in the stable tenure system for leaders and the requirements for receiving favorable performance evaluations. Responsiveness, thus, is important for promotion or maintaining the officials' status quo.

### *The Decision Stage Is Truncated to Find Solutions Quickly*

When facing intense social pressure over adverse events or crises, the upper government tends to respond with a truncated decision-making process. Under such time constraints and social pressure, the traditional, comprehensive decision-making process (Lasswell, 1956) of "*problem definition—agenda-setting—policy formulation—trade-offs—decision making*" is compressed and simplified to a matter of "*problem definition—agenda-setting—decision making*." Thus, the formation of alternatives omits the steps of cost-benefit analysis, trade-offs, and bargaining with executives or stakeholders. We refer to such a decision-making process as "*truncated decision making*," which involves the following characteristics.

First, the leaders will respond and act rapidly by enacting a policy direction; sometimes they may even announce an overcommitment to policy targets to express their determination to solve the problem. More specifically, the reform agenda is mainly event-driven and involves on-the-spot operations that take several forms, such as public declarations and calls for meetings. Often, a proposal that promises to quickly solve the current problem is adopted without carefully considering the costs and benefits. Such rapid policymaking and excessive commitment is not only effective for responding to and relieving pressure, but it is often a better option for leaders who operate with political rationality. These leaders often set high policy goals to signal a satisfactory response to their superiors and to the public.

Second, the leaders often make very general decisions, adopt vague language (Chöng & Chung, 2000; Huang, 2013), and leave some policy space for the local authorities to make adjustments or accommodations with stakeholders. In one way, this process may serve to delegate power over the process to local authorities (Goggin, 1990; Matland, 1995; Van Meter & Van Horn, 1975). In another way, this process moves from the general to the specific (Elmore, 1979). The result is that local authorities receive a lot of discretionary power in the implementation process and can mediate interests that underlie the "red line."

Third, the upper government puts pressure on the lower government and applies many enforcement measures (including obligatory targets or administrative orders) to make the lower officials complete the promised policy implementation (Liu, Lo, Zhan,

& Wang, 2015). Therefore, under the truncated decision-making process, policies can be enacted very quickly, so this approach is often very fast in responding to news events.

### *The Deliberation Process in Policy Implementation*

When the upper government makes a policy response, it must deal with a tangle of conflicts generated by interest groups, public demands, and local situations in the policy implementation process. The lower governments play a crucial role in this process by deliberating with various stakeholders and driving policy implementation<sup>5</sup>. This localized problem solving is a key step in the process of collecting information and addressing errors in the whole pattern.

The tacit agreement is that policy orientation and alternatives of “truncated decision making” are of greater political significance and are difficult to bargain with. However, the policy implementation process is one in which various stakeholders can express and pursue their interests. The diversified interests of different stakeholders and rival elites make policy implementation a process of trade-offs and calculated judgments. This gradually extends the policy implementation process and the period for practical decisions. As a result, policy implementation becomes a deliberation process of various trade-offs that culminate in a policy step we term “*deliberative implementation*.”

Achieving commitments made through “truncated decision making” is often excessive and depends entirely on the policy implementation process. Policy implementation, therefore, becomes a process of multiple decisions or a policy-specification process designed to promote effective negotiations and resolve various conflicts. This process must balance and reconsider the targets set in the previous stage and satisfy all parties’ interests.

The differentiation of implementation activities also requires a variety of actors to deal with diverse schemes or proposals, which could be the outcome of rational analysis in the execution stage. Depending on the specific policy context, the execution strategy of each locality can be very different due to differences among capabilities of local governments, and the degree of alignments of policy alternatives with local interests.

It should be emphasized that policy outcomes from “TDDI” are often uncertain. The result may be a full achievement of the policy targets and an effective resolution of the intended governance problem. It is also possible that the worst outcome could be just an empty promise without tangible results. The policy outcome is contingent upon several factors, including the quality of the truncated decisions, the ability of the lower government to coordinate and deliberate with other actors in society, the degree of difficulty involved in applying the truncated decision, and the ability of the upper government to monitor the performance of the policy implementation. In the next section, we analyze an empirical case of coal-mining industry reform in Shanxi.

## Coal-Mining Industry Policy Reform in Shanxi: An Empirical Case

### *Case Selection*

We select a policy reform case from the coal sector in Shanxi Province, amid all the other policy reforms in China, for several reasons. The first is the issue of data availability. Information about the public policy process in China is rare, and detailed information about the decision-making and implementation process is even more challenging. For a number of reasons, including accumulation of information through long-term study on industrial accidents and extensive personal networking, we were able to collect a considerable amount of information related to the policy reforms and conduct extensive interviews with relevant officials in Shanxi. Equally important is that reforms affecting the coal-mining industry displayed both a high degree of truncation in decisions and a high degree of flexibility in implementation. It is an extreme case rich in multifaceted detail that can effectively illustrate our argument and the proposed policy process model—TDDI.

China had a poor record of coal-mine fatalities, a record which began to change in 2003 (Nie, Jiang, & Wang, 2013) when the newly established agencies, the State Administration of Work Safety (SAWS) and the State Administration of Coal Mine Safety (SACMS), increased their monitoring efforts substantially. In addition, media scrutiny has also made it hard for enterprises and local governments to cover up accidents. Coal mine accidents and the public and media attention they attract impose great social pressure on decision makers, and such pressure quickly becomes a test for the governing capability of the local government. Such crises often become catalysts for an expedited decision process. However, the case of Shanxi is still quite rare in that the complexity involved in the coal-mining industry reform is enormous and challenging. Shanxi was concerned with redistributing assets (the coal mines) among different stakeholders and resulted in conflicts among intergovernmental agencies and other interest groups. Still, the coal-mining accidents were able to quickly induce reforms that would normally be very difficult to enact.

Another key reason we selected this case is that reform in the Shanxi coal-mining industry exemplifies many of the fundamental governance problems encountered in China's rapid transition, including regulation on industrial safety, the closure of outdated production facilities, improving environmental pollution, and so on. The coal-mining industry's property rights reform was a key government initiative for dealing with the industry's transition from a planned to a market economy and for enabling better energy production and improved industrial safety standards. Yet, the directions of this reform were not predetermined by any ideological scripts but were influenced rather by a number of factors that could help reveal how the government coordinates and balances various contradictions and conflicts in rapid reforms.

We examined two recent reforms in the coal-mining industry in Shanxi Province: "Paid Use of Coal Resources (Privatization Reform)" and "Mergers and Acquisitions (Deprivatization Reform)." These two policy changes happened one after the other,

which required major reversals of policy goals and practices that emerged in the context of strong economic development and the high number of coal-mining fatalities. These two policy changes allow us to see similarities and differences in the two policy processes, which involved different degrees of social pressure, truncation in policy making, and deliberation in policy implementation.

We have adopted the causal process tracking (CPT) approach (Collier, 2011; Kay & Baker, 2015), conducting interviews with policymakers, relevant government officials at lower levels, and different types of coal-mine owners. We also collected internal archival documents from the provincial government and several local (municipal or county) governments. These documents included detailed information about thousands of coal mines' property rights changes and many government officials' reports or files on the process of implementation.

We conducted three rounds of face-to-face, semi-structured interviews with 27 selected government officials and the representatives of 10 coal-mine owners from September 2010 to December 2013. The 27 government officials included two top leaders of the provincial government departments<sup>6</sup> that implemented the two reforms, four top leaders of the other departments that participated in these reforms, three technical experts who designed the changes in the property rights proposals, and 18 local government leaders who were in charge of policy implementation. Although we could not interview the four key provincial governors who oversaw the two reforms, we re-created the decision-making process by inviting most of the participants at decision-making meetings we could find to recall, describe, and discuss what had happened. We adopted several criteria to reduce self-selection bias by choosing 10 representative enterprises with differing types of mine ownership, different histories of mergers and acquisitions, and various scales of production capacity. The various types of ownership in the coal-mining industry included privately owned enterprises, township and village enterprises (TVEs), central state-owned enterprises (SOEs), provincial SOEs, municipal SOEs, and county SOEs.

### *An Overview of Shanxi's Coal-Mining Industry Policy Process*

In the early 2000s, after more than 30 years of rapid economic development and growth in energy demand, coal-mining safety was deteriorating in China (Homer, 2009; Shen, Gao, & Cheng, 2012; Tu, 2007; Wang, 2006; Wright, 2007).<sup>7</sup> The rapid increase in coal-mining accidents led to large-scale citizen complaints and petitions, and initiatives to reduce coal-mining fatalities and regulate the industry effectively became a policy priority.

Shanxi Province was the country's most heavily affected area in terms of coal-mining accidents. The province was not only the nation's largest energy producer (supplying one-third of China's total coal production) but was also heavily dependent on the coal-mining industry, which accounted for two-thirds of the province's GDP. From 2004 to 2012, the Shanxi government responded to the coal-mining safety problem and initiated two large-scale property rights reforms in the coal sector, leading the country in policy development.<sup>8</sup> As a result, the safety situation

improved quickly, and the death rate per million tons of coal produced in Shanxi declined from 2.81 percent in 2005 to 0.036 percent in 2014. Coal mine production came to be perceived as modernized, and coal bosses, likened to the “Beverly Hillbillies,” collectively withdrew from the scene. At the same time, thousands of small coal mines were shut down and billions of investments (RMB) flew in and out of the coal-mining industry in Shanxi in less than 8 years.

The implementation of these large-scale property rights reforms encountered no political resistance or other events that threatened the energy supply. The government not only responded quickly to the citizens’ concerns about coal-mining accidents and enacted significant reforms, but it also avoided larger scale conflicts and instability during these major changes. How could these policy changes be achieved? Were these policy changes total successes? What were the processes through which major decisions were made and implemented? In the following, we adopt the model of TDDI to depict and interpret these policy reforms and evaluate the performance of these reforms.

#### *High and Intensive Social Pressures Produced by Coal-Mining Accidents*

In 2001, after the Asian financial crises, China’s coal-mining industry began to recover.<sup>9</sup> The economic expansion that followed the financial crises led to an increase in coal prices, which tripled between 1999 and 2007<sup>10</sup>. As a result, the coal-mining industry became a hot spot for investment, and huge amounts of private capital flowed into the major coal-production provinces. In this context of fast economic development and rocketing coal prices, all state-owned coal mines and privately owned coal mines started expanding production capacity for quick profit. This expansion generated two unintended consequences for the coal industry. One was the further disruption of the coal mine ownership market, in which a clear legal structure did not exist. The industry became rife with many unlicensed coal mines, under-the-table contracts, and illegal subcontracts. Coal mines became attractive assets in the Chinese market because they often brought high returns by changing hands. This trend led to a chaotic ownership situation in the coal-mining industry. The other issue of concern was production safety because the authorities were unable to keep up with the pace of the proliferation of new mines, so regulating their safety became very difficult. The fuzzy ownership of coal mines also served as disincentives for coal-mine operators to invest in expensive safety equipment. Illegal production and random excavations cross the coal-field edges became a common phenomenon in the coal-mining industry (Wang, 2006; Wright, 2009). The weak regulatory capacity of the local government and the drive to expand as fast as possible led to “official coal collusion” between regulators and coal-mine bosses (Jia & Nie, 2017). The result was a dramatic increase in accidents and deaths among coal-mine workers.

Because of the rapid development of the Internet and the flourishing of media outlets, these coal-mining accidents were widely publicized across the nation. In Shanxi, an average of three major accidents (involving more than 20 fatalities each) happened annually between 2000 and 2008 (see Table 1). Even with the ongoing

**Table 1.** The Numbers of Mine Accidents, Death Tolls of Over 20 People, and Death Rates in Relation to Coal Production in Shanxi Province (from 2000 to 2008)

Years	Numbers of Major Accidents	Death Tolls	Death Rate, per Million Tons
2000	3	43, 31, 38	1.85
2001	3	23, 33, 26	N
2002	4	21, 44, 37, 30	N
2003	4	72, 25, 42, 28, 27	N
2004	5	28, 36, 33, 22, 33	N
2005	4	29, 72, 20, 36	0.905
2006	6	23, 56, 53, 47, 34, 24	0.85
2007	5	21, 26, 28, 21, 105	0.726
2008	3	20, 36, 25	0.423

technical progress in mining technology and devices, there were still serious accidents in which more than 100 people died (*Hongtong* accidents). The constant increase in production accidents resulted in several public outcries about China's energy governance and regulation problems (Shi, 2009; Tu, 2007). Both the central and local governments were very concerned with the situation.

#### *Truncated Decision-Making Process*

Since the early 2000s, the official media, represented by the *People's Daily* or the *Xinhua News Agency*, began to focus on reporting coal-mining accidents. In January 2003, *The Focus Interview* and *The News Probe*, two well-known investigative reporting programs, exposed false declarations concerning coal-mining accidents in Shanxi.<sup>11</sup> These events and the related reports drew nationwide attention to the safety problem, and the government (Shanxi Provincial government and the central government) faced huge social pressure for reform.

Under huge political and social pressure, the agenda for the Privatization Reform of Coal Mines emerged in the policy agenda of the Shanxi Government. In April, 2004, 36 people died in Shanxi's Xi County coal-mining accident. The provincial governor, Zhang Baoshun (Governor Zhang), having been promoted to his position only 2 months prior to the accident, was shocked by the chaotic conditions of property rights and the consequential predatory mining activities when he arrived at the scene. The many levels of subcontractors made it difficult for him to find out who the real owner was and who was responsible for this accident. He also discovered that the majority of local coal mines operated illegally. Thus, Governor Zhang decided to start a Privatization Reform (initial) on the spot. This reform was aimed at achieving good production performance according to the belief that "if you have property rights, you will invest in safety and enhance the resource recovery rate." Previously, the coal-mine operators had to obtain coal-mining rights by gratuitous administrative approval. The proposed reform, on the other hand, required the former coal-mine owners to pay for the coal resource of their coalfields (the so-called coal resource fee). In this process, the coal resource could be traded and transferred by public auction if the initial owners could not afford the fee. After payment, the



payers could gain legal coal-mining licenses. The coal resource fee was charged by the county government and allocated by the proportion of 3:2:5 among the provincial, municipal, and county levels of government. By clarifying the property rights of coal mines, many small coal-mine owners acquired formal licenses. Therefore, they could invest in devices, carry out planned production activities, and take charge of coal-mine safety. Thus, this reform attempted to create a stable institutional environment for small and private investors in the industry.

After confirming this reform guideline, the provincial government appointed the lead department and initial pilot counties to experiment with the reform ideas. Several months later, the Shanxi Government enacted Document No. 20 to start the Privatization Reform in 2005. However, just 4 days after the policy was published, Yu Youjun (Governor Yu) became the new governor, and Governor Zhang was promoted to provincial party secretary. Governor Yu had been working in one of China's special economic zones (Guangzhou), and on the second day after assuming his new position, another coal-mining accident in Ningwu County, Shanxi, claimed 36 lives, which highlighted the need for urgent action. One month later, Document No. 247 (based on Document No. 20) was published. This document emphasized the goal of marketization and encouraged more investment of private capital in the coal-mining industry. The Privatization Reform of coal mines came into full force. (However, this reform was not implemented fully as Governor Yu was removed from the governor's position in July 2007).

Despite the ongoing property rights reform, the coal price continued to increase; so did coal-mining accidents. The property rights reform could not generate the intended impacts quickly enough to reduce coal-mining accidents and the attendant mortality rate as expected. At the same time, an administrative accountability mechanism became a common practice in China following the example of the SARS case in 2003 when two senior officials were held accountable for the incompetent response to the crisis in its early stages. Many local officials in Shanxi were held accountable and removed from their positions following coal-mining accidents in their regions. This changing political environment only put more pressure on the provincial government.

In September 2007, less than a month after Meng Xuenong became Governor of Shanxi, 21 people died in the Zuoyun County coal-mining accident. A few months later, in December 2007, 105 people died in the Hongtong County coal-mining accident. It appeared that the Privatization Reform had not worked and something had to be done to change the deteriorating situation. Together with the relevant government agencies, Governor Meng discussed a new reform proposal for resolving safety problems at the scene of the Hongtong accident. The Deprivatization Reform emerged as the new change in policy. It attempted to improve the safety situation by increasing state ownership and the scale of coal-mining operations through mergers and acquisitions, based on the belief that "if all the coal mines were controlled by the SOEs, the safety issue could be fully ensured." The reform designated the major mergers-SOEs to lead the acquisition and set an entry barrier for small coal mines. In this process, the mergers would return the "coal resource fee" to the small coal

mines by the government-mandated prices (about 1.5 times the original price).<sup>12</sup> Depending on the means of paying for the residual coal resource, the provincial government achieved the purpose of consolidating ownership and deprivatizing it because the majority of small coal mines were private ones or TVEs. The provincial government believed that ownership of most coal mines by SOEs would dramatically reduce fatalities since large SOEs typically had better technologies and more capital to invest in safety equipment. They were also much easier to regulate since the promotion of the management team of SOEs was under the control of the organizational departments of the upper government.

Less than a year later, in September 2008, the Shanxi Government proposed Document No. 23, which designated six provincial state-owned enterprises as the major mergers, and designated other coal mines whose production capacity exceeded the industry entry level as secondary mergers to initiate an acquisition effort that would reduce 2,840 coal mines to 1,500. This was aimed at closing smaller coal mines with a production capacity below 300,000 tons per year. However, Governor Meng had to resign to assume responsibility for another major accident related to production safety before this policy could be implemented.<sup>13</sup>

Out of frustration, the central government appointed Wang Jun, then Minister of the State Administration of Work Safety (SAWS), as the new governor of Shanxi. A few months later, in February 2009, the Tunlan Coal Mines accident claimed 78 lives. This accident served as a trigger for Governor Wang to restart the Deprivatization Reform that was designed by his predecessor and to organize the relevant provincial government departments to promote the reform process. At the National People's Congress (NPC) meeting in March of the same year, reporters from various media questioned the Shanxi delegation about the coal-mining incidents. Facing the media, Governor Wang announced ambitious policy targets and said Shanxi had an "unwavering commitment to implementing mergers and acquisitions and would shut down another 500 mines." One month later, the Shanxi Government published Document No. 10, which proposed a higher standard than that in the previous document, Document No. 23. This new policy raised the industry entry level on production capacity from 300,000 tons to 900,000 tons per year and aimed to reduce the total number of mines from 2,840 to 1,000, 500 less than in the previous plan (Table 2).

In summary, the decision-making processes for both the Privatization Reform and the Deprivatization Reform were severely handicapped and truncated both in terms of their agenda setting and deliberation of pros and cons of various policy choices, due to the influence of frequent mining accidents and the consequential political and social pressures. The personal experience and judgments of the decision makers also played an important role in setting the direction for policy change.

First, the policy challenges posed by the Shanxi coal-mining industry at the time involved both market formation and market regulation when the industry was making a transition from a planned and publicly owned industry to an industry that was increasingly market based with mixed ownership. The frequent mining accidents were symptomatic of the chaotic transition process in which property rights were fuzzy and the safety regulation system was weak. However, the sustained media

**Table 2.** Major Accidents and Policies in the Coal-Mining Industry Reform in Shanxi

	Decision Maker (Governor)	Event (Accident)	Key Content of Reform	Document #	Decision Period
Reform 1-A	<b>Governor Zhang</b> January 2004–July 2005	Xi County (36 deaths) April 2004	Clarification of ownership	Shanxi Government Document [2005] No. 20, Opinions on promoting the integration of coal enterprise resources	15 months
Reform 1-B	<b>Governor Yu</b> July 2005–August 2007	Ningwu County (36 deaths) July 2005	Privatization of ownership	Shanxi Government Order [2005] No. 247, Publication of “Opinions on promoting the integration of coal enterprise resources”	8 months
Reform 2-A	<b>Governor Meng</b> September 2007– September 2008	Zuoyun County (21 deaths) September 2007 Hongtong County (105 deaths) December 2007	Consolidation of ownership/ merger and acquisitions (M&A)	Shanxi Government Document [2009] No. 10, Notice on issues related to further accelerating mergers and acquisitions of coal enterprises.	7 months
Reform 2-B	<b>Governor Wang</b> September 2008– December 2012	Tunlan Coalmine (78 deaths) February 2009	Deprivatization of ownership/ intensified merger and acquisitions (M&A)	Shanxi Government Document [2008] No. 23, Opinions on the implementation of accelerating mergers and acquisitions of coal mining enterprises.	2 months

attention, mounting social pressure, and the official accountability system drove the policy agenda to focus almost exclusively on curbing coal-mining accidents, which severely limited policy options that should have been considered.

In addition, the growing social and political pressure also meant that new policy ideas were discussed in a very limited fashion in a very short time<sup>14</sup>. The situation deteriorated during the period we examined. For instance, when Governor Zhang was initiating a new policy change of Privatization, he was able to conduct some local experiments first. The lead department in the provincial government responsible for designing the reform was able to consult with other provincial government departments as well as some local governments. However, for Governor Yu's reform, the policy design was carried out mainly by people drawn from the leading group of political elites and lead departments of the provincial government. In Governor Meng's time, the staff involved in policy decisions were reduced to an elite group of four (the provincial governor, the vice provincial governor, the deputy director of coal, and the chief engineer of the province's Planning Department). During Governor Wang's tenure, the policy idea was based largely on the personal judgment of the governor himself without much consultation.<sup>15</sup>

The personal experience and judgment of the decision makers—in our case the four governors—also played an important role in setting the direction of the policy change. For example, in the Privatization Reform, the causes of the crisis were presumed to be vague property rights and illegal multi-level contracting. Thus, Governor Zhang favored a reform to clarify property rights over coal resources. Governor Yu, who succeeded Governor Zhang, endorsed this view and continued the previous reform plan because of his experience in Guangdong, where market-based reform has led China's economic reform in the past 40 years. During the period of the Deprivatization Reform, Governor Meng and Governor Wang, who both had work experience in Beijing and in the central government agency, had more faith in the role of government in controlling large SOEs than in the role of government in regulating small private enterprises. They believed the coal-mining accidents were caused by unauthorized production by small private coal mines. Increasing public ownership and the concentration of the coal-mining industry in Shanxi would help reduce the number of small private coal mines and subsequently reduce coal-mining accidents. M&A became an instrument to achieve this policy goal.

### *Implementation as Deliberation*

Due to the limited space and complexity of the reform processes, we selected the implementation of Deprivatization Reform as a case to explicate how policy implementation has become a deliberation process and how the lower governments have had to balance various interests among different stakeholders while maintaining the overall spirit of reform.

The policy aims of the Deprivatization Reform set in Document No. 23 were to increase the concentration of the coal-mining industry in Shanxi by ensuring all enterprises in the industry had a production capacity of 900,000 tons per year or

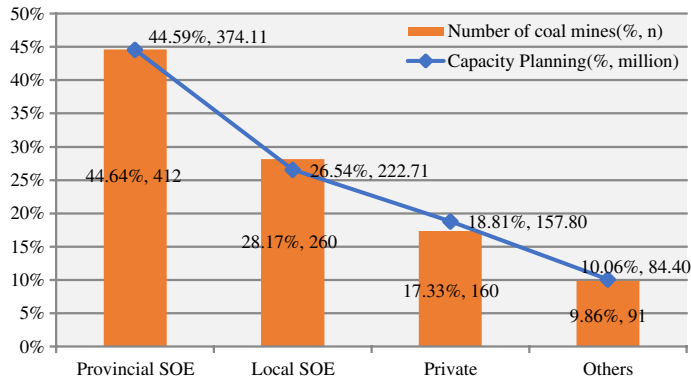
more, and to reduce the number of coal mines from 2,840 to 1,000, with 75 percent of coal production capacity owned by the six major designated provincial SOEs (which would be the primary mergers). In addition, municipal SOEs, county SOEs, TVEs, and large private coal mines (which would be the secondary mergers), with a production capacity exceeding 900,000 tons, could also become mergers or maintain their own status. Small coal mines that did not meet the 900,000-ton criterion were to be merged or shut down.

Coal-mining enterprises of different sizes and different ownership faced different challenges during this reform process. The six major SOE coal mines (the designated mergers) were not necessarily eager to merge a larger number of small coal mines, which meant they would have to assume responsibility for ensuring production safety at these mines and expend large amounts of money to buy and re-establish them. These six SOEs viewed this reform as a political task they had to take on,<sup>16</sup> and hoped to merge coal mines of higher quality while refusing the weaker ones when possible. The secondary mergers, on the other hand, had better potential to become beneficiaries in the process because they could expand their production capacity by merging with small coal mines at the government's guiding price, which tended to be lower than the market price. In addition, their close links with the local governments provided them with opportunities to merge with small coal mines of higher quality. At the same time, the small coal mines (coal mines with a production capacity of less than 900,000 tons per year) had to face the prospect of being closed or merged. They had to try their best to minimize their losses and seek good buyers.

During the implementation of the Deprivatization Reform, the county governments played a major role as policy executors working with coal enterprises and facilitating the M&A process by establishing criteria to identify qualified mergers and the small local coal mines to be merged.<sup>17</sup> They also had to determine whether small coal mines should be merged with the designated six major mergers or with the secondary mergers. Thus, the county governments had lots of discretionary power in this matchmaking process to reach the intended policy targets.

Based on our interviews, the county governments adopted two principles. The first was to keep as much coal mine revenue locally as possible. Due to the legacy of previous property rights reforms for coal mines, the county governments were often very important stakeholders in local coal mines instead of neutral policy executors, (see note 10). Profits and taxes from local coal-mining enterprises were among the main fiscal resources for county governments and directly determined their political importance.<sup>18</sup> In addition, local coal mines had been playing an important role in supporting local public affairs. So, county governments had every reason to try to maintain some form of control over these coal mines.

The county governments adopted different strategies to pursue their goals, depending on the initial situation of their local coal mines. First, if they had relatively larger local coal mines, they would support them to create new enterprises that would merge small coal mines in their jurisdictions, or they would support the



**Figure 2.** The Statistics in Coal Mine Numbers, Capacity Planning, and Types of Property Rights After the Deprivatization Reform.

Note: Capacity planning means designed annual production capacity of coal mine.

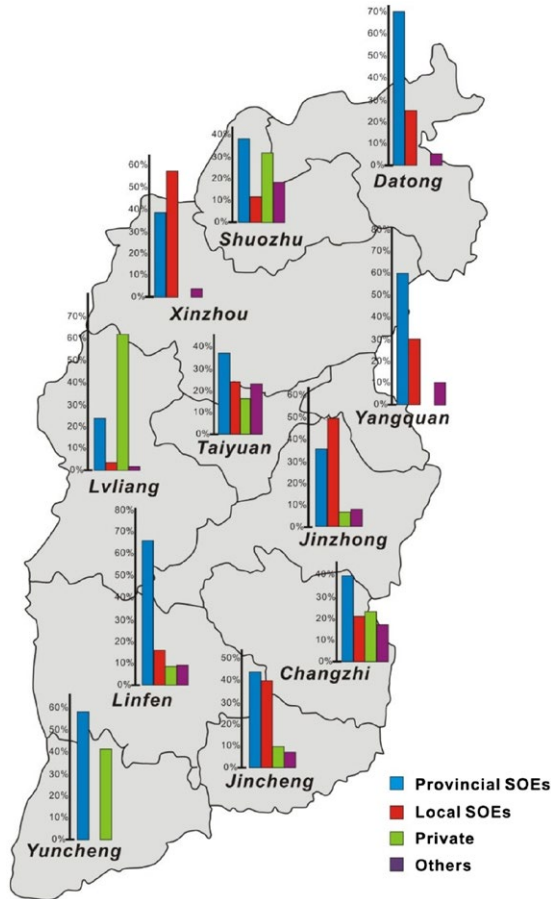
Data source: Authors' collection and calculation. The initial data are from Shanxi provincial government and relevant documents.

local coal mines whose production was more than 900,000 tons, to maintain their original status. By doing so, the county governments sought to reserve as much profit and revenue locally as possible. Second, if they didn't have large SOEs but instead had many small coal mines under the ownership of TVEs or county SOEs, they would try to bring competition to the M&A process. The county governments chose to strategically introduce several rather than one merger from outside to maintain their influence in shaping the local coal-mining industry.<sup>19</sup> Third, if they had neither large SOEs nor many TVEs or county SOEs, the county governments would give their county SOEs to one of the six designated major mergers and persuade local private coal mines to join it. In this way, the local government could have a profit-sharing agreement with the major mergers by setting up joint subsidiary corporations locally.

While trying to gain or maintain financial advantage in the process, county governments also had to strictly implement the reform policy to show their loyalty to the upper governments. In addition, helping small coal mines find a qualified merger could also help maintain economic and social stability, and prevent social unrest of any kind.

Two tactics county governments often used were *forced marriage* and *legal threats*.<sup>20</sup> "Forced marriage" meant the county government packaging various quality coal mines together to be merged by the big coal mines. The small coal mines within their jurisdictions had different qualities (such as different mining conditions and resource reserves); the county governments mixed them into packages to ensure that no acquirer could have significantly more advantageous resources or could discard the unfavorable mines. Through this approach, the county governments could help some poor coal mines find buyers by packaging coal mines together. The second tactic was to use "administrative threats" to ensure the mergers obtained good coal mines. Almost all of the small coal mines had histories of illegal production. When faced with dissatisfaction and noncompliance, the county governments commonly





**Figure 3.** The Share of Capacity Planning for Mines with Various Kinds of Property Rights in Different Areas After the Deprivatization Reform.

*Note:* Capacity planning means the designed annual production capacity of coal mine.

*Data source:* Authors' collection and calculation. The initial data are from Shanxi provincial government and relevant interviews.

sought the help of the local discipline inspection department, the public security department, or the judicial department to promote policy implementation.

By the end of 2012, the Deprivatization Reform was pretty much complete, with the total number of coal mines reduced from 2,840 to 1,053, all with a production capacity of over 900,000 tons per year. The new, reduced number of mines was very much in line with the policy target of 1,000 coal mines. However, the reform did not achieve its policy target of placing 75 percent of coal production capacity in the hands of six provincial SOEs. Only 44.59 percent of the total production capacity was within the six provincial SOEs. Local SOEs, private, and other coal mines took 26.54 percent, 18.81 percent, and 10.06 percent, respectively (see Figure 2). The implementation of the Deprivatization Reform only partially fulfilled the policy targets that were set at the decision stage. There were also great variations in different regions of Shanxi in achieving these policy goals. For example, the Datong Region had the best performance (with 70.3 percent of coal production capacity owned by

provincial state-owned enterprises), while the Lvliang region recorded the worst performance (with 23.2 percent of coal production capacity owned by provincial state-owned enterprises) (Figure 3).

In hindsight, this is both understandable and almost inevitable. In the rush to make decisions about the Deprivatization Reform, the provincial government did not want to get entangled in the myriad of trade-offs among different constellations of M&As because it could delay or even derail the reform process entirely. Rather, the few policy targets selected were simple, relatively easy to measure, and indicative of the policy orientation. In addition, the provincial government also gave county governments much leeway in designing their own reform plans locally and negotiated with these county governments for their contribution to the overall policy targets. Flexibility and variation among different counties in reaching the policy targets were allowed in the negotiation between the provincial government and county governments. In this process, the provincial government was aware of the incentives of the county governments and their capabilities in balancing between squeezing local coal mines and achieving policy targets set in the provincial reform plan. Finally, one should be aware that the deliberative implementation process did not change the nature of the difficulties involved in implementation; it only changed the battlefield of the implementation stage. It was not the maximization of benefits for the provincial government based on a grand plan. Rather, it was the bottom-up accumulation of the maximization of many benefits over costs at different localities.

### Conclusion and Future Research

In previous sections, we have described TDDI and used it to analyze an empirical case of coal-mining reforms in Shanxi Province in China. In this section, we will discuss the merit of TDDI and its implications for designing and implementing public policy in China, as well as future directions of policy changes in China.

The TDDI model has two core elements, rapid decision making and flexible implementation, which are complementary and inseparable. Rapid policy response allows key government leaders to make important decisions based on political instinct rather than on calculated rational analysis. Nagging issues that often bog down important policy decisions can be ignored. Suggestions and recommendations from technical experts or bureaucrats can also be pushed aside. Such rapid policy responsiveness allows key decision makers to capture the moment and extinguish popular discontent or deflect social pressure at one stroke. In China's social-political environment, such a grand gesture is often more important for the general public than the actual measures taken. Of course, a truncated decision process also requires flexible decision-making procedures. In many cases, these impromptu decisions will be confirmed later in some *pro forma* procedures.

The equally important part of this model is how a flexible implementation stage serves as a deviation-rectification system. It is understandable that the truncated decision-making process may leave many conflicts unresolved, due interests

unattended, and holes and glitches yet to be fixed. It is often the lower governments that have both the knowledge and capability to mediate among various interest groups and to address these thorny issues in a deliberative way. The lower governments can also modify the policy goals/targets promised at the decision stage if they are indeed unreasonable and difficult to accomplish. Thus, the deliberative implementation process can serve to remedy errors resulting from a rapid decision-making process and avoid bigger mistakes down the road.

In summary, the TDDI model developed here captures some core elements of behavioral pattern in the decision-making process inside China's governance system and can help us understand why China is able to build a responsive state without making radical political changes in a rapidly changing society.

At the same time, this article does not claim that the TDDI model always has discernible effects on policy responsiveness or that its implementation will always generate satisfactory outcomes. A unique feature of this pattern is that a degree of uncertainty about policy outcomes is inherent in the model. On the one hand, the truncated decision process may lead to the right decision by ignoring the complex issues involved in the decision stage, but these issues may return at the implementation stage, which could compromise the final outcome. On the other hand, the truncated decision process may lead to poor policy decisions because the rapid policy response bypasses the process of rational analysis and evidence-based judgment. Here, the flexible implementation stage could play a mediating role in reducing the potential damage or loss of social values to the public. In other words, TDDI could compromise good policies and temper the potential for big blunders at the same time. The final policy outcome depends on the complexity of the issues, the implementation environment, and the capabilities of various stakeholders, as has been demonstrated in the case of the Shanxi coal-mining reforms.

While the TDDI model is developed in the context of China's transition and the empirical case is based on the specific reforms in Shanxi's coal-mining industry, this line of research has broader implications for research in public policy process in general.

First of all, the TDDI model proposed here is a contingency model where the final outcome is dependent on various factors as has been discussed previously. More research can be done to understand better the determinants of the policy outcome in this process. Second, the TDDI model may have some useful implications for research on state development in transitional or developing countries where the decision-making process is simultaneously dynamic and chaotic. Previous research has focused primarily on the political landscape and institutional structures where governing capability-expansion is considered essential (Evans & Heller, 2015). Better understanding on how public policy is developed and implemented through policy process models such as TDDI will complement and enhance our understanding of state transformation in these countries. Finally, a time-based policy process model such as TDDI may provide a useful analytical lens to understand policy development in developed countries as well. In recent years, the rise of populism has led some countries to "truncated decision-making" through some hasty referendums

such as the referendum on whether the UK should leave the EU. Clearly, the “deliberative implementation” process after the Brexit referendum gives both sides some time and room to contemplate and negotiate so that the potential damage from Brexit can be minimized.

Finally, it should be clear that a decision pattern such as TDDI is not a replacement of the fundamental reform of the policy process that is needed in the long run in China. Ultimately, China needs to push for political reforms, through which the policy process can be better institutionalized and rationalized. Various stakeholders will be able to participate formally at due stages of the policy process.

**Lan Xue** is professor and dean at the School of Public Policy and Management, Tsinghua University, Beijing, China. His major research interests include the policy process, science and technology policy, and global governance.

**Jing Zhao** is an assistant professor at the School of Public Policy and Management, Tsinghua University, Beijing, China. Her research interests include the policy process theory, industrial policy, and environmental governance.

### Notes

An earlier version of this article was presented at the Mercator Institute for China Studies, Brown University and Tsinghua University in 2015, the Annual Conference of American Society for Public Administration in 2016. We would like to thank Edward Steinfeld, Barry Naughton, Barbara Stallings, Sebastian Heilmann, Ma Jun, Zhu Xufeng, Chen Ling, and other participants of the workshops and interviewees during the field work the authors conducted. The authors would like to thank the Funds for Creative Research Group of National Natural Science Foundation of China (71721002) for the sponsorships. Dr. Jing Zhao is the corresponding author for this article.

1. This understanding of the policy process led to the adoption of strategies involving successive, limited comparisons that were sequential rather than strategies to conduct comprehensive searches for solutions to problems.
2. Western scholars studied China’s policy process for many years (between the 1950s and 1990s), but these studies show a limited grasp of China’s complexity and its policymaking dynamics (Ma & Lin, 2012). These studies generally relied on classical theoretical frameworks, such as analyses of “political elites,” “power struggles among factions,” and “fragmented authoritarianism” (Barnett, 1967; Lieberthal & Lampton, 1992; Nathan, 1973; Tsou, 1976).
3. Two important components of the “Beijing Consensus” (Halper, 2010; Huang, 2011; Ramo, 2004; Williamson, 2012) are involved: the willingness to experiment with policy choices, and the maintenance of an authoritarian regime.
4. The truncated decision-making process could be used by different levels of government, but in China, this decision process is used by the central government or provincial government more often because these two levels have more decision power, and the truncated feature is more obvious. In the lower levels, the decisions are more about the policy details than alternatives. In our case, the upper level is the provincial government and the lower level is the municipal governments.
5. As the enforcer of public policy, the lower government plays two roles in policy execution—as both an administrative agent and an interest seeker (Zhao et al., 2013). As interest seekers, the lower governments pursue local interests. They need to protect against losses to local interest groups, including losses to both on-budget and off-budget revenues, in order to maintain local political stability. Therefore, the lower government acts as both a profit-driven actor and an important stakeholder. However, as the bureaucratic system internalizes the principal-agent model, the lower government is an agent of the higher level government and is, therefore, responsible for faithfully implementing the policy directives from above. Additionally, as an enforcement agent at the local level, the lower government has important responsibilities for mediating stakeholders, alleviating conflicts, overcoming

resistance, maintaining local stability, and ensuring the policy implementation's success. Like the lower government, national ministries and monopoly state-owned enterprises (SOEs) also frequently play the role of enforcers.

6. The two departments are The Department of Land and Resources and The Department of Coal Industry in Shanxi Province. These two departments are in charge of the Privatization Reform and the Deprivatization Reform, respectively.
7. The death rate per million tons was 5.71 percent in 2000. This terrible mortality rate quickly drew the attention of the international community after China joined the WTO, and China's coal was even widely described as "bloody coal." Meanwhile, the rapid increases in production brought a sudden surge of wealth for coal-mine owners. The coal production regions were generally impoverished, and faced many social contradictions such as poor residents, migrant miners, upstart coal-mine owners, corrupt lower government officials, and monopolistic state-owned enterprises (SOEs).
8. The safety issues and unlicensed mines also existed in all coal-producing provinces, but the production capacities of most of the other provinces were limited, and their impacts were much less compared to Shanxi. Of course, they have learned a lot from Shanxi's experience in solving coal safety problems.
9. Before China's economic reforms commenced, the nation's coal-mining industry was the main feature of management in a planned economy. The state-owned coal mines were managed at national, provincial, municipal, and county levels, and included the Key State-Owned Coal Mines (directly controlled by the Ministry of Coal Industry) and the Local State-Owned Coal Mines (controlled by corresponding local departments). Since 1979, the Ministry of Coal Industry followed a liberalizing policy of "*you shui kuai liu*" (literally translated as "let it flow faster if there is water") and promoted the principle of "encouraging state, collectives, and individuals to work together in developing mines." Through such policies, a mixture of county governments, township governments, and individuals participated in establishing coal mines, and the ownership of these mines gradually became diversified. In the 1990s, the rise of small coal mines and the abandonment of coal price controls brought about an even faster expansion of coal production until the Asian financial crises (Shen et al., 2012).
10. Source: Shanxi Coal Market Website: <https://www.sxmtxs.com/> (in Chinese).
11. On January 12 and 18 of 2003, *CCTV Focus Interview* issued a report entitled "Track the truth of false declaration," and the *News Probe* published a "Death list" to expose the Yangquan village coal-mining accident in Linfen City, Shanxi Province. In August that year, three accidents in just eight days, in which 99 people died, happened in Shanxi. This event and the related reports rocked the public nationwide.
12. The government-mandated price is, on average, 1.5 times the original prices. However, both the coal prices and the illegal trade prices of coal mines have been increased by several times in these years.
13. On September 8, 2008, a dam break occurred in Linfen City, causing the death of 254 people. Governor Meng was dismissed less than a week after this event.
14. It is not the rapid turnover of governors leading to increasingly truncated decision processes but the different social pressures faced by the governors. Social attention gained momentum with the increase in accidents, and the government had to take some quick action to solve the problems. The range of policy consultation also had to be narrowed because of time limitation (without enough coordination with many lateral government agencies or stakeholders).
15. Based on interviews with relevant government officials.
16. The provincial government required that each of the six designated provincial state-owned enterprises merge with over 100 small coal mines during the reform process.
17. There is another level of government, the municipal level, between the provincial and county levels of government. In the coal-mining industry reform, the municipal government was only in charge of transmitting messages and opinions between the provincial- and county-level governments.
18. This is particularly crucial for major coal production counties that were the leading coal producers in Shanxi because over 70 percent (and the proportion is still increasing) of their fiscal revenues came from the coal-mining industry.
19. This measure effectively balanced the power between the parties to external mergers. Therefore, the lower governments were able to hold their bargaining power to avoid losing their local endowments at low prices. They were also able to grasp essential power after the mergers and acquisitions, which they conducted as part of the initiative to achieve the policy goals.

20. Based on interviews with local government officials at Jin Chen City.

## References

- Barnett, Arthur Doak. 1967. *Cadres Bureaucracy and Political Power in Communist China*. New York: Columbia University Press.
- Baumgartner, Frank R., and Bryan D. Jones. 1991. "Agenda Dynamics and Policy Subsystems." *The Journal of Politics* 53 (4): 1044–74.
- Baumgartner, Frank R., Christian Breunig, Christoffer Green-Pedersen, Bryan D. Jones, Peter B. Mortensen, Michiel Nuytemans, and Walgrave, Stefaan. 2009. "Punctuated Equilibrium in Comparative Perspective." *American Journal of Political Science* 53 (3): 603–20.
- Cai, Hongbin, and Daniel Treisman. 2006. "Did Government Decentralization Cause China's Economic Miracle?" *World Politics* 58 (4): 505–35.
- . 2009. "Political Decentralization and Policy Experimentation." *Quarterly Journal of Political Science* 4 (1): 35–58.
- Cai, Yongshun. 2008. "Power Structure and Regime Resilience: Contentious Politics in China." *British Journal of Political Science* 38 (3): 411–32.
- Cai, Yongshun, and Lin Zhu. 2013. "Disciplining Local Officials in China: The Case of Conflict Management." *The China Journal* 70: 98–119.
- Chan, Hon S., and David H. Rosenbloom. 2010. "Four Challenges to Accountability in Contemporary Public Administration: Lessons From the United States and China." *Administration & Society* 42 (1S): 11S–33S.
- Chan, Kwan N., and Shuang Zhao. 2016. "Punctuated Equilibrium and the Information Disadvantage of Authoritarianism: Evidence from the People's Republic of China." *Policy Studies Journal* 44 (2): 134–55.
- Chen, Jidong, Jennifer Pan, and Yiqing Xu. 2016. "Sources of Authoritarian Responsiveness: A Field Experiment in China." *American Journal of Political Science* 60 (2): 383–400.
- Chen, Ling, Jing Zhao, and Lan Xue. 2010. "Making a Competitive Selection or a Compromise: An Explanatory Framework and a Consensus-Centered Model in the Process of Policymaking in China's Economic Transition (in Chinese)." *Management World* 10: 59–72.
- Cheung, Chau-kiu, and Kwan-kwok Leung. 2007. "Enhancing Life Satisfaction by Government Accountability in China." *Social Indicators Research* 82 (3): 411–32.
- Ch'ng, Chae-ho, and Jae Ho Chung. 2000. *Central Control and Local Discretion in China: Leadership and Implementation during Post-Mao Decollectivization*. Oxford University Press on Demand.
- Collier, David. 2011. "Understanding Process Tracing." *PS: Political Science & Politics* 44 (4): 823–30.
- Distelhorst, Greg, and Yue Hou. 2017. "Constituency Service under Nondemocratic Rule: Evidence from China." *The Journal of Politics* 79 (3): 1024–40.
- Eissler, Rebecca, Annelise Russell, and Bryan D. Jones. 2014. "New Avenues for the Study of Agenda Setting." *Policy Studies Journal* 42 (S1): S71–86.
- Elmore, Richard F. 1979. "Backward Mapping: Implementation Research and Policy Decisions." *Political Science Quarterly* 94 (4): 601–16.
- Evans, Peter, and Patrick Heller. 2015. "Human Development, State Transformation, and the Politics of the Developmental State." In *The Oxford Handbook of Transformations of the State*, eds. Stephan Leibfried, Evelyne Huber, Matthew Lange, Jonah D. Levy, and John D. Stephens. Oxford Handbooks Online. <https://doi.org/10.1093/oxfordhb/9780199691586.013.37>
- Goggin, Malcolm L. 1990. *Implementation Theory and Practice: Toward a Third Generation*. Glenview, IL: Scott Foresman & Co.
- Halper, Stefan. 2010. *The Beijing Consensus: How China's Authoritarian Model Will Dominate the Twenty-First Century*. New York: Basic Books.
- Heilmann, Sebastian. 2008a. "From Local Experiments to National Policy: The Origins of China's Distinctive Policy Process." *The China Journal* 59: 1–30.



- . 2008b. "Policy Experimentation in China's Economic Rise." *Studies in Comparative International Development* 43 (1): 1–26.
- Heilmann, Sebastian, and Oliver Melton. 2013. "The Reinvention of Development Planning in China, 1993–2012." *Modern China* 39 (6): 580–628.
- Heilmann, Sebastian, and Elizabeth J. Perry (eds.). 2011. *Mao's Invisible Hand: The Political Foundations of Adaptive Governance*. Cambridge, MA: Harvard University Asia Center.
- Heilmann, Sebastian, Lea Shih, and Andreas Hofem. 2013. "National Planning and Local Technology Zones: Experimental Governance in China's Torch Programme." *The China Quarterly* 216: 896–919.
- Homer, Andrew W. 2009. "Coal Mine Safety Regulation in China and the USA." *Journal of Contemporary Asia* 39 (3): 424–39.
- Hsu, S. Philip. 2009. "In Search of Public Accountability: The 'Wenling Model' in China." *Australian Journal of Public Administration* 68 (S1): S40–50.
- Huang, Haifeng. 2013. "Signal Left, Turn Right Central Rhetoric and Local Reform in China." *Political Research Quarterly* 66 (2): 292–305.
- . 2015. "International Knowledge and Domestic Evaluations in a Changing Society: The Case of China." *American Political Science Review* 109 (3): 613–34.
- Huang, Yasheng. 1996. "Central-Local Relations in China During the Reform Era: The Economic and Institutional Dimensions." *World Development* 24 (4): 655–72.
- . 2011. "Rethinking the Beijing Consensus." *Asia Policy* 11 (1): 1–26.
- Jia, Ruixue, and Huihua Nie. 2017. "Decentralization, Collusion and Coalmine Deaths." *Review of Economics and Statistics* 99 (1): 105–18.
- Jones, Bryan D. 1994. *Reconceiving Decision-making in Democratic Politics: Attention, Choice, and Public Policy*. Chicago: University of Chicago Press.
- Jones, Bryan D., and Frank R. Baumgartner. 2005. "A Model of Choice for Public Policy." *Journal of Public Administration Research and Theory* 15 (3): 325–51.
- Kay, Adrian, and Phillip Baker. 2015. "What Can Causal Process Tracing Offer to Policy Studies? A Review of the Literature." *Policy Studies Journal* 43 (1): 1–21.
- Kingdon, John W. 1995. *Agendas, Alternatives and Public Policies*. New York: HarperCollins.
- Kostka, Genia, and William Hobbs. 2012. "Local Energy Efficiency Policy Implementation in China: Bridging the Gap between National Priorities and Local Interests." *The China Quarterly* 211: 765–85.
- Lasswell, Harold Dwight. 1956. *The Decision Process: Seven Categories of Functional Analysis*. College Park, MD: University of Maryland Press.
- Lieberthal, Kenneth, and David M. Lampton (eds.). 1992. *Bureaucracy, Politics, and Decision Making in Post-Mao China*. Berkeley, CA: University of California Press.
- Lindblom, Charles E. 1959. "The Science of 'Muddling Through'." *Public Administration Review* 19 (2): 79–88.
- . 1979. "Still Muddling, Not Yet Through." *Public Administration Review* 39 (6): 517–26.
- Liu, Nicole Ning, Carlos Wing-Hung Lo, Xueyong Zhan, and Wei Wang. 2015. "Campaign-Style Enforcement and Regulatory Compliance." *Public Administration Review* 75 (1): 85–95.
- Lü, Xiaobo. 2013. "Social Policy and Regime Legitimacy: The Effects of Education Reform in China." *American Political Science Review* 108 (2): 423–37.
- Ma, Jun. 2012. "The Rise of Social Accountability in China." *Australian Journal of Public Administration* 71 (2): 111–21.
- Ma, Jun, and Muhua Lin. 2012. "Policymaking in China: A Review of Chinese Scholarship." *China Review* 12 (1): 95–121.
- Matland, Richard E. 1995. "Synthesizing the Implementation Literature: The Ambiguity-Conflict Model of Policy Implementation." *Journal of Public Administration Research and Theory* 5 (2): 145–74.
- Mei, Ciqi, and Zhilin Liu. 2014. "Experiment-Based Policy Making or Conscious Policy Design? The Case of Urban Housing Reform in China." *Policy Sciences* 47 (3): 321–37.
- Mertha, Andrew. 2009. "'Fragmented Authoritarianism 2.0': Political Pluralization in the Chinese Policy Process." *The China Quarterly* 200: 995–1012.

- Mintrom, Michael, and Sandra Vergari. 1996. "Advocacy Coalitions, Policy Entrepreneurs, and Policy Change." *Policy Studies Journal* 24 (3): 420–34.
- Nathan, Andrew J. 1973. "A Factionalism Model for CCP Politics." *China Quarterly* 53: 34–66.
- Nie, Huihua, Minjie Jiang, and Xianghong Wang. 2013. "The Impact of Political Cycle: Evidence from Coalmine Accidents in China." *Journal of Comparative Economics* 41 (4): 995–1011.
- Pump, Barry. 2011. "Beyond Metaphors: New Research on Agendas in the Policy Process." *Policy Studies Journal* 39 (S1): 1–12.
- Qian, Yingyi, Gerard Roland, and Xu Chenggang. 2006. "Coordination and Experimentation in M-Form and U-Form Organizations." *Journal of Political Economy* 114 (2): 366–402.
- Ramo, Joshua Cooper. 2004. *The Beijing Consensus*. London: Foreign Policy Centre.
- Rithmire, Meg E. 2014. "China's 'New Regionalism': Subnational Analysis in Chinese Political Economy." *World Politics* 66 (1): 165–94.
- Sabatier, Paul A. 1988. "An Advocacy Coalition Framework of Policy Change and the Role of Policy-oriented Learning Therein." *Policy Sciences* 21 (2/3): 129–68.
- Sabatier, Paul A., and Christopher M. Weible (Eds.). 2014. *Theories of the Policy Process*. Boulder, CO: Westview Press.
- Shen, Lei, Tian-ming Gao, and Xin Cheng. 2012. "China's Coal Policy since 1979: A Brief Overview." *Energy Policy* 40: 274–81.
- Shi, Xunpeng. 2009. "Have Government Regulations Improved Workplace Safety? A Test of the Asynchronous Regulatory Effects in China's Coal Industry, 1995–2006." *Journal of Safety Research* 40 (3): 207–13.
- Shih, Victor, Christopher Adolph, and Mingxing Liu. 2012. "Getting Ahead in the Communist Party: Explaining the Advancement of Central Committee Members in China." *American Political Science Review* 106 (1): 166–87.
- Simon, Herbert. 1983. *Reason in Human Affairs*. Stanford, CA: Stanford University Press.
- Su, Fubing, and Dali L. Yang. 2000. "Political Institutions, Provincial Interests, and Resource Allocation in Reformist China." *Journal of Contemporary China* 9 (24): 215–30.
- Tsou, Tang. 1976. "Prolegomenon to the Study of Informal Groups in CCP Politics." *The China Quarterly* 65: 98–114.
- Tu, Jianjun. 2007. "Coal Mining Safety: China's Achilles' Heel." *China Security* 3 (2): 36–53.
- Van Meter, Donald S., and Carl E. Van Horn. 1975. "The Policy Implementation Process: A Conceptual Framework." *Administration & Society* 6 (4): 445–88.
- Wang, Shaoguang, and Peng Fan. 2006. "Regulating Death at Coalmines: Changing Mode of Governance in China." *Journal of Contemporary China* 15 (46): 1–30.
- . 2008. "Changing Models of China's Policy Agenda Setting." *Modern China* 34 (1): 56–87.
- . 2009. "Adapting by Learning: The Evolution of China's Rural Health Care Financing." *Modern China* 35 (4): 370–404.
- . 2013. *Chinese Consensus Decision: "Open the door" and "Break-in."* Beijing: China Renmin University Press.
- Whittaker, D. Hugh, Tianbiao Zhu, Timothy Sturgeon, Mon Han Tsai, and Toshie Okita. 2010. "Compressed Development." *Studies in Comparative International Development* 45 (4): 439–67.
- Williamson, John. 2012. "Is the 'Beijing Consensus' Now Dominant?" *Asia Policy* 13 (1): 1–16.
- Wright, Tim. 2007. "State Capacity in Contemporary China: 'Closing the Pits and Reducing Coal Production.'" *Journal of Contemporary China* 16 (51): 173–94.
- . 2009. "Rents and Rent Seeking in the Coal Industry." In *Rent Seeking in China*, ed. Tak-Wing Ngo, and Wu Yongping. Florence: Routledge, Chapter 6.
- Xu, Chenggang. 2011. "The Fundamental Institutions of China's Reforms and Development." *Journal of Economic Literature* 49 (4): 1076–151.
- Xue, Lan, and Kaibing Zhong. 2012. "Domestic Reform and Global Integration: Public Administration Reform in China over the Last 30 Years." *International Review of Administrative Sciences* 78 (2): 284–304.

- Zhao, Deyu. 2008. "Conflicts of Values in Policymaking (in Chinese)." *Management World* 10: 41–52.
- Zhao, Jing, Ling Chen, and Lan Xue. 2013. "The Role of Local Government, Interest Selection, and Behavior Pattern: A Local Government Theory Based on the Policy Process (in Chinese)." *Management World* 2: 90–106.
- Zheng, Haitao, Martin De Jong, and Joop Koppenjan. 2010. "Applying Policy Network Theory to Policy-making in China: The Case of Urban Health Insurance Reform." *Public Administration* 88 (2): 398–417.
- Zhou, Xueguang, Hong Lian, Leonard Ortolano, and Yinyu Ye. 2013. "A Behavioral Model of 'Muddling Through' in the Chinese Bureaucracy: The Case of Environmental Protection." *The China Journal* 70: 120–47.
- Zhu, Xufeng. 2008. "Strategy of Chinese Policy Entrepreneurs in the Third Sector: Challenges of 'Technical Infeasibility'." *Policy Sciences* 41 (4): 315–34.
- . 2009. "The Influence of Think Tanks in the Chinese Policy Process: Different Ways and Mechanisms." *Asian Survey* 49 (2): 333–57.
- . 2011. "Government Advisors or Public Advocates? Roles of Think Tanks in China from the Perspective of Regional Variations." *The China Quarterly* 207: 668–86.
- . 2014. "Mandate versus Championship: Vertical Government Intervention and Diffusion of Innovation in Public Services in Authoritarian China." *Public Management Review* 16 (1): 117–39.
- Zhu, Xufeng, and Lan Xue. 2007. "Think Tanks in Transitional China." *Public Administration and Development* 27 (5): 452–64.
- , and Youlang Zhang. 2016. "Political Mobility and Dynamic Diffusion of Innovation: The Spread of Municipal Pro-Business Administrative Reform in China." *Journal of Public Administration Research and Theory* 26 (3): 535–51.
- Zhu, Yapeng. 2012. "Policy Entrepreneur, Civic Engagement and Local Policy Innovation in China: Housing Monetisation Reform in Guizhou Province." *Australian Journal of Public Administration* 71 (2): 191–200.
- Zuo, Cai Vera. 2015. "Promoting City Leaders: The Structure of Political Incentives in China." *The China Quarterly* 224: 955–84.