



Economic Reform and Institutional Innovation

YAO Yang

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Economic Reform and Institutional Innovation

30 Years of China's Reform Studies Series

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CHAPTER 1

Introduction

Any unbiased mind would consider China's economic progress in the last 30 years as a success. China has maintained an average economic growth rate of 9.7% per annum and has made the transition from a planned to a market-based economy. Defying the repeated warnings of an imminent collapse, Chinese society has remained relatively stable yet dynamic. In fact, for the majority of the population, the last 30 years have been the best period since China sustained defeat in the Opium War against the western powers.

Some economists believe that China's miraculous growth could be attributed to conventional economics; that is, China has correctly followed all the steps recommended by the standard economic theory. According to the standard economic theory, high saving rates, better human capital, technological progress, free trade, stable macroeconomic conditions, prudent fiscal policies, and other factors are essential for economic growth. China has done much better than other developing countries in all these aspects. From this point of view, China's high economic growth record is not a miraculous one (Perkins 2005). However, this view leaves an important question unanswered: If economic theory offers such an accurate prescription, why have most developing countries not followed it? In other words, why has China been able to adopt the right growth recipes? In order to answer this question, one needs to retrace China's growth path and study the institutional changes that have accompanied its dramatic economic growth in the last 30 years.

1.1 BACKGROUND

By any standard, China's institutional changes have been a success. Despite shortfalls and even setbacks, Chinese reforms continued unabated, successfully transforming the Chinese economy from a planned to a market-based one. This transformation can be rightly considered what Douglass North termed "an efficient institutional change"

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(North 1990). These reforms have transformed the Chinese society from a chaotic one teeming with political and social indignities to one brimming with hope and potential. The transition experienced by China definitely outperformed those of the former Soviet Union and Eastern European countries.

The most significant features of the Chinese reform experience have been gradualism and the unconventional intermediate steps taken to achieve the desired goals. This assessment, of course, admits exceptions. For example, China's accession to the World Trade Organization (WTO) was not gradual. In 1999, China decided to reach a bilateral agreement with the United States; however, there were no prior public debates on the merits and drawbacks of joining the WTO. It was a hasty decision of the reformist leadership to preempt any backlash from the conservative camp. Notwithstanding this and possibly several other minor instances, Chinese reforms have by and large been gradual. Rural reform is regarded by some (Wu 2004) as an abrupt institutional change. However, it took eight years for the reform to come to fruition, and during those eight years, there was serious political infighting among the top leadership, and intermediate reform steps were adopted. The reform of the two pillars of the planned economy—the planned price system and the state ownership of firms—is a classical example of gradualism. In order to minimize political resistance and also to test the waters, the dual-track price system was adopted in the mid-1980s. This was undertaken to reform the planned price system; this system was in place for 10 years before prices in the last area of reform, the exchange rate regime, were unified in 1994. The ownership reform has been an even slower process. It started in the 1980s in the form of *fangquan rangli* or giving the manager more decision-making powers and leaving greater amounts of financial gains within the firm; this eventually evolved into true ownership in isolated localities in the early 1990s. The late 1990s witnessed the large-scale privatization of state-owned enterprises (SOEs). However, even today, there exist localities where the SOEs play a major role in the economy. In other words, the ownership reform has been ongoing for more than 20 years.

In addition to gradualism, many of the intermediate reform steps are unconventional by standard economic and political theories. The most noticeable example is that of the mixed and even undefined ownership in the township and village enterprises (TVEs). It certainly does not fit into the standard economic theory that posits clearly defined property rights as a precondition for economic performance. Despite this, the TVEs have been widely regarded as a success. Indeed, they contributed to 40% of China's industrial growth in the late 1980s and early 1990s (Lin and Yao 2001). Another example is China's weak legal system. It is believed that the enforcement of contracts is one of the key institutional factors for economic growth. However, despite its notoriously weak legal system, China has maintained a marvelous growth record, especially in the areas

concerning enforcement of commercial contracts and intellectual property rights. Firms have managed to circumvent these problems and thrive in such an environment full of legal risks. Perhaps, the most striking example of China's unconventional approach to economic reforms is the interplay between its local and central governments. While the central government has maintained strong political control over the local governments, the local governments are given sufficient scope to explore economic growth and, more importantly, improve institutions to support this growth. It is a wonder how this balance of power has been achieved and maintained because some other large countries usually tend to fail in this attempt.¹

However, piecemeal gradual reforms are not guaranteed to succeed. In fact, they may create vested interest groups who having benefited from the previous rounds of reform, may oppose further reforms in the fear of losing their gains. It is true that Chinese reforms created vested interest groups. For example, the dual-track price system created large amount of rents for the privileged officials and their relatives to tap into the planned resources; government officials and other privileged people who had these rights could trade them in the underground market for huge amounts of money. This could have been detrimental to the unification of prices. Another example is the partial ownership reform (e.g., incorporation) that gave SOE managers vast discretionary power but did not subject them to a sound corporate governance structure. These managers would prefer the intermediate steps of reform because they would enjoy the maximal amount of benefits. Despite this, the reform finally broke the managers' resistance and led to full privatization.

Numerous studies on Chinese reforms have been undertaken in the last three decades. Most of them sought to explain the reforms and the consequent successful economic growth witnessed by China. These studies not only deepened our understanding of China but also contributed to the general economic theory. For example, studies on the TVEs shed light on the complexities of property rights and their functions in the real world; studies on rural and SOE reforms provide evidence of the importance of incentives in shaping the economic behavior of agents; studies on fiscal decentralization enrich our understanding of the role of incentives and commitment in governmental relationship and institutional change; and studies on the speed of institutional transition remind us of the importance of time and contextual background in institutional transplanting. However, few of these studies have tried to provide a positive theory on how the Chinese reforms were brought about and why they have been successful.

This book is an attempt to contribute toward such a theory. We have adopted an evolutionary perspective to explain the Chinese reforms. This is because institutional

1. See Zhuravskaya (2000) for a discussion on how decentralization in Russia degenerated to central control.

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change can only be analyzed in a coherent model under the assumption of bounded rationality. As a result of the debate surrounding incomplete contracts, it is now clear that complete contracts are possible if agents are fully rational; that is, if agents can foresee all the future states and know their probabilities.² To the extent that they are contracts among a large group of people, institutions can be optimally designed to take into account any future variations in the natural and human states so that there is no need for institutional change (Wang, Wei, and Yao 2005). In order to accommodate institutional change, it is necessary to introduce bounded rationality that does not allow agents to completely foresee future states; that is, we need to assume some form of adaptive rationality for the agents involved in institutional design. In fact, adaptive rationality is the underlying assumption in Deng Xiaoping's doctrine of "crossing the river by touching the stones"—the tenet followed by most Chinese reforms in the last 30 years. It is the correct premise for a theory that attempts to provide a realistic explanation of the Chinese reforms.

Based on this premise, our theory puts the evolution of ideology at the center of the Chinese reform process. Institutions are framed by ideology; that is, ideas tell us what constitutes an acceptable society. Institutional changes are never planned—they are not mechanical results of some settled routine. Instead, they are results of seemingly uncoordinated human actions that intentionally or unintentionally trespass the boundaries set by the existing institutions. While most of these actions prove futile in the end, some of them bring "surprises": There are new ways to organize our daily life toward a better end. These surprises force us to ponder about the ideology that frames our design of the current institutions. If the surprises are strong enough, we may have to change our ideology and thus, the institutions.

Viewing institutional change as ideological discontinuity is quite different from the conventional views held in mainstream economics. The full rationality assumption and equilibrium analysis confine the economic explanations of institutional change to a narrow group of institutional changes that fit into the mechanical structure that prevails in mainstream economics. In most cases, institutional changes are attributed to changes in exogenous parameters leaving the institution itself in a black box. Studying the role of ideology is one way to unlock the black box. This line of research is more consistent with the views expressed by other social sciences, particularly, psychology and political science, and has long been advocated by Douglass North (North 1990; 2005).

We rely on three key elements—decentralization, the encompassing state, and volitional pragmatism—to reach an explanation for the evolution of ideology and institutions in China.

2. See Maskin and Tirole (1999) for a discussion.

The old ideology had lingered on and dominated the political and economic stages when Chinese reform began in the late 1970s. The central government was confined by the old ideology and was slow in adopting reform measures. Decentralization provided the opportunity for institutional innovations at the local level. To the extent that reforms always implied major or minor alterations to the ideology, the spread of a reform depended on the change in the ideology held by the central government. Institutional innovations would have been locally confined or would have died out if the central government had held on to its old ideology. Two factors, however, led to the changes in the ideology on the part of the central government. One was the encompassing nature of the Chinese State. “Encompassing,” a word borrowed from Olson (1982), means that the interests of a specific social group overlap with those of the whole society. Thus, an “encompassing state” is one whose interests largely overlap with those of the whole society. Being this kind of state helped China in making efficient institutional changes. Another factor was volitional pragmatism, which refers to pragmatism that brings about conscious human actions that take the future into consideration (Bromley 2006). Human actions are directed by the purposes that the actor attaches to them. This is volition. Volitional pragmatism is important for continuous reforms because it allows for conscious human actions—in the case of China, conscious local experiments—and keeps the future open to all alternatives.

In addition to these three elements, we notice that institutional innovations tend to reinforce each other. The survival of an institution depends on the number of people whose interests are supported by it. As a result, the institutions that are not congruent with other institutions have a small chance of survival because they have a smaller number of people supporting them. This kind of positive feedback is particularly important for market reforms. Markets are interlinked; as long as some markets are opened up, there will be a demand for the opening up of more markets.

This book aims at achieving two objectives. One is to provide a comprehensive and unique explanation for China’s economic reform, and the other is to contribute to the literature of institutional change. The current literature on institutional change is unsatisfactory because it overly relies on the static equilibrium analysis and fails to explain endogenous institutional changes (Greif 2006). The reason for this failure lies in the inability of the static equilibrium analysis and full rationality to account for the dynamic process of institutional change. Based on the assumption of adaptive rationality and a dynamic model, this book attempts to provide a theory of endogenous institutional change in the direction proposed by Greif (2006). Central to Greif’s proposal are the quasi-parameters that do not change to a great extent in the short run but change in the long run as a response to the evolution of the system itself. The equilibrium analysis insisted by the conventional economic theory fails to explain dynamic changes

in institutions, and the historic analysis of other disciplines leaves a great amount of uncertainty about the direction of institutional change; this is because it considers too many factors that may influence institutional change. According to Greif, the short-run stability of institutions can be explained by the stability of the key quasi-parameters, and the long-run dynamics of institutions can be accounted for by the endogenous changes in those quasi-parameters. Ideology is a quasi-parameter in our model. It does not change in the short run and restricts the range of institutional change; however, it changes in the long run and thus allows institutions to move away from their old domains. Thus, our model fulfills the purpose of Grief (2006) to explain both the stability and changes in institutions.

The rest of the introduction provides a more detailed description of the key elements mentioned above, the main ideas of the model to be developed in this book, and an application of the model to explain the Chinese reforms. A plan of the chapters is presented at the end of the introduction.

1.2 KEY ELEMENTS

1.2.1 Decentralization

If there is one thing that economists agree upon regarding the causes of China's success in the last 30 years, it is decentralization. In this case, decentralization refers to fiscal decentralization according to which governments at various levels are responsible for their own revenues and expenditures. From the fiscal contracting system of the 1980s to the central-local sharing system after 1994, decentralization has been the thread that China's fiscal system has hung on. Some studies (Qian and Weingast 1997; Qian and Roland 1998) view decentralization in China as a commitment device for the central government to credibly commit itself to the market; that is, decentralization restricts the interference of the central government in the market. Thus, they refer to Chinese decentralization as "market-preserving federalism."

It is worth noting that decentralization was rooted in China's planned system instituted before 1978. Maskin, Qian, and Xu (2000) distinguish between the M- and U-forms of organization. The M-form is a multi-divisional form, and the U-form is a unitary form. While the U-form adopts a centralized decision process, the M-form adopts a decentralized one. Unlike the U-form Soviet model, the Chinese planned system was an example of the M-form. Although there were cycles of decentralization and centralization, Chinese planning never attained the precision of the Soviet model.

It is apparent that the rural reform not only started China's economic reform but also played a decisive role in setting its direction. This reform was locally initiated and its focus was decentralization; that is, the transfer of power from the commune and

brigade system to the farmers. The success of the rural reform transformed the dominant ideology. The idea that decentralization works better than centralization took a firm hold in party thinking and public discourse. Since then, Chinese reforms have always been piecemeal and locally experimented before national adoption.

Decentralization helps institutional innovations for four reasons. First, local governments have greater information advantage as compared with the central government because they are closer to the grassroots. Second, local governments face a larger variety of challenges than the central government. One key element here is the competition among different localities. While competition may lead to regional protectionism at some point of time, in the long run, institutional improvements will prove to be a more effective way for a city or province to move ahead of the others. Third, local governments face tighter budget constraints than the central government. This is largely due to China's inadequate fiscal sharing system in which there exists a strong asymmetry between the duties and revenues at different levels of the government. That is, lower-level governments have a smaller share of the revenues but have to foot a larger share of the expenditure (Yao and Yang 2003). Rigid budget constraints force local governments to adopt growth-friendly policies, which often require institutional innovations. Fourth, decentralization facilitates institutional experiments. Local governments can experiment with different institutions and compete with one another to eventually be selected by the central government for national adoption. This reduces the chances of the central government selecting an inappropriate institution.

1.2.2 The Encompassing State

In his seminal book *The Rise and Decline of Nations*, Mancur Olson (1982) forcefully argued that the formation of long-lasting interest groups leads to the decline and stagnation of nations. Decline and stagnation are more likely to occur if the interests of different groups are greatly diverse and contesting because this is more likely to lead to distributive policies than growth-enhancing ones. The interests of the ruling group are very important for a country's economic performance. If these interests overlap with those of the whole society, growth is more likely to occur because advancing the interests of the ruling group is advancing the interests of the whole society. In this case, Olson refers to the ruling group as one having "encompassing interests." Yao (2004a) borrowed this concept and defined the encompassing state as one that pursues the overall welfare of the society. East Asian states have been encompassing states, especially in their early years of development.

An encompassing state has the following characteristics. First, it is more concerned with the long-term interests of the country than the short-term political gains. Second, it resists interest group pressures and does what it views to be the best for the country

as a whole. Third, it insulates itself from populist callings for quick but short-lived improvements made to the living standards of the common people.

The Chinese State is qualified as an encompassing state and has played a critical role in promoting Chinese reforms. Although there does not exist an agreed blueprint for the future, the central government is always willing to make changes for the better. In particular, it has skillfully introduced changes to stem the deterioration of living standards of the working class during the period of rapid structural changes and SOE privatization. It did not succumb to the populist pressures that called for a halt in the reform. Rather, it started nationwide retraining programs and helped millions of workers find new jobs.

The origin of the Chinese encompassing State can be traced back to the Confucian tradition and China's recent history of humiliations inflicted by the western powers and the ensuing declines. Building a strong China has been the cherished dream of several generations of Chinese leaders. In the reform era, this dream has been transformed into a "growth consensus" that places the greatest emphasis on economic growth. The other two factors leading to the Chinese encompassing State are also worth mentioning. One is the egalitarian nature of the Chinese society at the beginning of reform implementation, and the other is the wide representation of society by the Chinese Communist Party (CCP). An egalitarian society provides the Chinese government incentives as well as supports its efforts to adopt policies that benefit the society as a whole. This is mainly because it is unnecessary and impossible for the government to form an alliance with a single social group in order to maintain its power in an economically and socially equal society. Before it came into power in the mainland, the CCP largely comprised people from the working class. However, after the Communist Revolution leveled out the Chinese society, the CCP began to attract members from all walks of life. This made it easier for the CCP to become a party of the people and adopt policies that benefited the society as a whole.

While decentralization provides the basis for institutional innovations, the encompassing state guarantees that these innovations are selected for better overall social welfare. In this process, the encompassing state has more power than a fully democratic government. However, this does not mean that becoming a Leviathan is its inevitable destiny. The encompassing state has to use its power wisely. Indeed, if the long-term interests of the country are always its central concern, there is no reason for the encompassing state to do otherwise.

1.2.3 Volitional Pragmatism

Volitional pragmatism is the kind of pragmatism that puts purpose before action. A pragmatist leaves the future open to all options; a volitional pragmatist imagines the future and takes actions to realize it. In more conventional terminology, a volitional

pragmatist acts in accordance with his ideology that is in constant revision to deal with surprises. Surprises are the discrepancies between the intended and actual outcome. When surprised, the pragmatist senses that something is wrong in his current ideology and tries to revise it. This process will only stop when there are no more surprises.

The process of institutional change in China has been precisely such a process. The rural reform is a good case at hand. By the mid-1970s, grain supply became a serious national problem. At that time, this was a surprise as it was against the ideology that the existing commune system was the best for China. The experiment of Xiaogang Village then brought a positive surprise to the leaders: Certain changes to the prevalent commune system would bring higher grain output. Later, in the mid-1980s, the leaders were greeted with another surprise. When the dust of land reforms settled, the farmers were no longer satisfied with being confined to their land and began industries in the countryside. The emergence of the rural industry became a powerful force that shook the foundation of the planned economy. However, soon another wave of surprises swept across. This was the large-scale migration of farmers to the coastal cities, which posed a huge challenge to the long-standing belief that farmers should remain on their land. Once the leaders as well as the general public realized the positive contributions of the migrants, the settled ideology began to evolve and was finally replaced by a new one that considers migrants to be an indispensable component of the national economy.

Volitional pragmatism leads us to seriously consider the role of ideology in institutional change. Douglass North first noted this in his book (North 1990) and further elaborated on it in his later book *Understanding the Process of Economic Change* (North 2005). Nature and society are full of uncertainties that are beyond human comprehension. We humans, thus, rely on self-constructed models—ideologies—to design institutions that in turn guide our actions. Here, ideology sets the meta-infrastructure of the society, and institutions are deployed to guide our daily operations, or in John R. Commons's terminology (1924), "institutions are the working rules for the society." However, North treats ideology more as a source of stagnation and an obstacle to institutional change. In contrast, Bromley emphasizes that institutional changes occur when ideology takes abrupt turns. In his opinion, pragmatists realize that ideology is not the ultimate goal but a means to stabilize human expectations and interactions. The ultimate goal is to realize something more substantial, be it individual material gains, social welfare, equity, environmental sustainability, or something else worth pursuing. Therefore, pragmatists are always ready to change their ideology if the existing institutions do not deliver outcomes that bring them closer to the ultimate goal. The process could resemble the following.

Ideology decides what types of institutions are allowed. People then act within the limits imposed by these institutions. These actions change the nature and the state of

the society, which may further surprise us. That is, we may find discrepancies between the unfolding results and our goals. At this point, pragmatists realize that their ideology is not an eternal truth, and rather than trying to single-mindedly change the institutions within the confinement of this ideology, they begin to revise this ideology and thus allow institutions to evolve. This process continues until no more surprises arise.

1.3 THE MODEL

With the help of the building blocks introduced in the last section, we can now discuss the model that this book will develop and apply in order to explain China's economic reforms. This model is concerned with the interplay of local innovations and the evolution of the central government's ideology. One problem with such a model is with regard to defining institutions in concrete economic and political contexts; in the absence of such definitions, it is difficult to draw meaningful inferences. China has undertaken reforms in different spheres having distinct characteristics. While the logic behind the reforms would be the same, it is difficult to delve into the details unless we study a specific reform. The strategy of this book is to build a model for one significant reform and apply its logic to explain the other reforms.

We take China's gradual approach to SOE privatization as the reform to be studied by our model. It features a central government and many local governments with minimal adaptive rationality in the process of privatization. The central government decides the ideology, and the local governments decide the degree of privatization within their jurisdiction. It can be conveniently assumed that ideology is a position on the measure of privatization; that is, it is a share of privatized SOEs for each region. Initially, the central government has a fixed ideology about the optimum degree of privatization for the country and will impose punishment on a local government if it deviates from this ideology. Local governments then experiment with privatization taking into account the potential punishment and economic gains of privatization. Privatization improves firm efficiency but also incurs substantial costs of which compensation paid to laid-off workers is a major part. Regions with small or negative net gains from privatization will not experiment with privatization in order to avoid the central government's punishment. Only those regions with sufficiently high net gains will experiment. The central government observes the extent of privatization and economic performance in each region and then evaluates the effect of privatization. If economic performance improves because of privatization, then the central government randomly adjusts its tolerance of privatization upward; otherwise, it randomly adjusts its tolerance downward. Then the game enters the second round, and the dynamics and the possibility of convergence can then be discussed. Perhaps, the key to converge to full privatization is

the positive externalities that privatization in one region offers to other regions. One type of such externality is competition for capital. As long as privatization leads to better performance and thus a higher demand for capital, provinces with a smaller degree of privatization will lose capital and suffer slower economic growth. Another type of externality arises from the mobility of labor. As long as it improves the efficiency of firms, privatization leads to employment growth. This growth can be strong enough for privatization in one region to not only absorb the redundant workers in the same region but also those in the other regions. This will lower the costs of privatization in other regions and make it easier for them to privatize their SOEs.

It is evident that this model is a representation of Deng Xiaoping's famous doctrine of crossing the river by touching the stones. The three building blocks—decentralization, the encompassing state, and volitional pragmatism—are essential to its logic. Decentralization enables local experimentation. The encompassing state requires the central government to advance national interests, which are economic gains in the model. Finally, volitional pragmatism demands that the central government changes its ideology when the latter seems to deviate from the outcome of local experiments. Our model is thus a representation of China's gradual approach to reform. One of its distinct characteristics is that it puts the evolution of ideology at the center of the reform process. The reform is gradual in that ideological shifts have cumulative effects. However, as we will see when the model is presented in Chapter 5, the interaction between local experiments and central ideology may lead to multiple equilibria. Changes in economic parameters (such as wage rate and other factor prices) may bring nonlinearity into the gains of reform, which may trap the system in a position of partial reform instead of leading it to full reform. In these circumstances, bold jumps in ideology toward full reform release the constraints on local governments and allow some of them to continue with the reform experiments. Therefore, gradualism does not exclude bold moves under certain circumstances. Quick privatization and accession to the WTO at the end of the 1990s are only two examples.

The model mentioned above explains how ideology and institutional change converge in one reform. What remains to be explained is the manner in which these different reforms reinforce each other. Here, we will borrow the concept of strategic complementarities developed by Milgrom and Roberts (1990a, 1990b). By strategic complementarities, Milgrom and Roberts imply a situation in which one player's holding of one strategy increases the payoff of the other player's holding of another strategy and vice versa. In our context, this implies that the adoption of one institution increases the chances of survival of another institution and vice versa. In addition, the evolution of the two institutions would follow a path such that they mutually enhance each other. We define an institution for a particular arena as a (temporary) equilibrium of

the strategies that people adopt in that arena. For example, the decline of the dual-track price system depended on the dynamics in two separate arenas—the choice made by the SOEs of selling their products in the open market or as per the government plans and a person’s choice between becoming a farmer or setting up a TVE in the countryside. The selling of products in the open market by the SOEs facilitated the rural residents’ choice of setting up TVEs because the TVEs had access to only the open market. On the other hand, the rural residents’ choice of setting up TVEs prompted the SOEs to sell more of their products in the open market. This reinforcement process then led to the result in which the setting up of TVEs became an equilibrium in the countryside and selling in the open market became an equilibrium in the city. Consequently, this led to the decline of the dual-track price system.

Here, we implicitly assume that institutional change follows decentralized choices made by individual agents and that the role played by the government is only passive. This assumption simplifies our analysis. Since most major reforms in China were initiated locally and later adopted by the central government, this assumption is not that far from reality. Our definition of institution helps us to easily borrow the idea of Milgrom and Roberts.

1.4 APPLICATIONS

Our theory is a good candidate for explaining the Chinese reform experience. To start with, we note that Deng Xiaoping’s doctrine of crossing the river by touching the stones is consistent with the assumption of adaptive rationality. Deng is regarded as the “general architect” of Chinese reforms, but he did not have a plan for China’s future when he launched the economic reforms in 1978. Many events that occurred while implementing the reforms were surprises to him. For example, he told a group of foreign guests in the mid-1980s that the development of the TVEs was unexpected and exceeded his expectations. When reforms began at the end of the 1970s, many people inside the party seriously doubted their success and had objections to them. Deng’s strategy was “don’t argue”; that is, he wanted to brush away the ideological debates and focus on the results of the reforms. His strategy to reforms was best characterized as “go and see,” which is the essence of volitional pragmatism. He always conducted experiments and waited to see if they improved upon the existing system. If they did, he introduced them throughout the country; otherwise, he continued experimentation.

At the very beginning, the success of the rural reform rested on the positive surprises brought on by experiments in different localities. The new production system called the Household Responsibility System, or HRS, had a profound impact on the reform strategies implemented in the 1980s. This was partly due to the ascendance of Zhao

Ziyang and Wan Li (the two party secretaries who led Sichuan and Anhui, respectively, through successful rural reforms) to the central government but more because of the powerful effect of the HRS in bringing incentives to economic actors. In the area of the central-provincial fiscal relationship, a contracting system was adopted, with each province getting a different revenue sharing contract with the central government. In the area of enterprise reform, contracts with managers were introduced to bolster their incentives. In the area of price reform, the dual-track price system was adopted to provide incentives for more output. Some of these reforms were successful, but others were not. Enterprise reform fitted into the second category because there was a limit to contracting with managers. The drawbacks of the successful reforms also emerged quickly. The dual-track price system led to corruption, and the fiscal contracting system led to a very weak central government. The central government found new directions of reform in the early 1990s when reforms started again after Deng Xiaoping's famous tour to the south. Contracting with managers gave way to outright privatization; dual prices gave way to unified prices; and fiscal contracting gave way to a uniform central-local sharing system.

The process of privatization has not been a linear one. It started in Shunde in Guangdong Province and Zhucheng in Shandong Province in the form of employee share holding. This model of privatization was adopted by other localities. However, its drawbacks emerged quickly: It did not solve the free-rider problem; that everyone had shares resulted in no one being responsible for the common good. Then, Shunde began to experiment with a second wave of privatization, which was characterized by the concentration of shares with the management. Management buyout, or MBO, became the most popular model of privatization. This then raised waves of criticism in the late 1990s and early 2000s accusing the management of ripping off state assets through MBO. Privatization, however, kept moving, albeit silently. Although there still exist some localities that have a relatively large SOE sector, the path has been decisively set for a more private ownership-based economy. Evidently, this has a lot to do with the change in the dominant ideology. The reform experiences in the 1980s and early 1990s showed that private and mixed ownership outperformed state ownership. In its Fourteenth Congress held in 1992, the party revised its ideology and admitted that socialism could allow private ownership and markets. Building a "socialist market economy" became the banner for the reforms in the 1990s, and the "Three Representations" announced at the Sixteenth Party Congress held in 2002 finally paved the road for a full transition to a market economy.

There is no doubt that different reforms have reinforced each other in the way suggested by strategic complementarities. The interplay between the emergence of the rural industrial sector and the dual-track price system is a case in point. In 1984, the central

government launched the dual-track price system. In the meantime, the TVEs and private firms existed in some pockets of the countryside. The dual-track price system gave the rural industrial sector an opportunity to access materials and markets that were originally tightly controlled by state plans. The increased demand from the TVEs then provided incentives for urban SOEs to demand that the state plan be shrunk so that they could supply more to the markets that paid higher prices for their products. As a result, the two institutional innovations—the rural industrial sector and the dual-track price system—reinforced each other and eventually led to the dismissal of the dual-track price system. Players in the two different arenas—the countryside and the city—would, through their interplay in the commodity market, adopt the strategies that were strategic complementarities in equilibrium. This led to the result that the equilibria; that is, the institutions, in the two arenas showed strategic complementarities. Another example is the interplay between the private economy and the SOE reform. The private economy helped the SOE reform in two ways. First, its growth intensified market competition and compressed the profit margins of the SOEs, which in turn forced the SOEs to raise productivity through institutional innovations. Second, the private sector provided employment to the redundant workers laid off from the SOEs, making it easier for the SOEs to reform. On the other hand, the SOE reform also helped the development of the private sector although its contribution might not have been as large as that of the private sector for the SOEs. The SOE privatization itself was an acknowledgment of the private sector's superior performance. After privatization, former SOEs lost the privileges extended to them by the government; thus, there was a more level playing field for all types of firms.

1.5 PLAN OF THE BOOK

The remainder of the book is divided into two parts. Part I is devoted to building the theory. It comprises five chapters. Chapters 2, 3, and 4 discuss the three institutional foundations—decentralization, the encompassing state, and volitional pragmatism, respectively—for Chinese reforms. Our discussions will mostly revolve around historic reviews; meanwhile, we will also probe into several theoretical issues including the meaning of institutions and the incentives and mechanisms for institutional change. Chapter 2 contains more historical narratives. Chapter 3 shifts to more theoretical explorations. Specifically, we will propose the concept of disinterested governments and discuss its implications for China's rapid economic growth in the last 30 years. The appendix to Chapter 3 presents a theoretical model that explores the conditions under which a disinterested government would emerge. Chapter 4 provides a detailed discussion on the roles played by human intentions and ideology in institutional change.

We aim at providing a synthesis of North and Bromley's ideas in order to present a more realistic view of the relationship between ideology and institutions. Chapter 5 then combines the three elements—decentralization, the encompassing state, and volitional pragmatism—to build an evolutionary model of institutional change in China. Our model is both a representation of China's reform process and an extension of the institutional literature, especially Greif's approach along the line of quasi-parameters. Chapter 6 discusses institutional reinforcement through strategic complementarities. Our task is to extend Milgrom and Roberts' concept of strategic complementarities from a game in a single transaction to a game involving multiple transactions. By defining an institution as an equilibrium of the game associated with each of the transactions, we can study how institutions reinforce each other by strategic complementarities.

Part II comprises five chapters—Chapters 7–11—which apply the theory to the studies of five reforms; namely, rural reform, enterprise reform, dual-track price system, opening up, and financial sector reform, respectively. Our purpose is not only to provide theoretical applications but also to present to the reader comprehensive reviews and critiques of China's major reforms. Chapter 12 concludes the book with a summary of the lessons learned from China's 30 years of reform and issues that remain to be addressed. It also discusses the direction and manner in which China should head into the future.

CHAPTER 2

Decentralization

China has had a centralized bureaucratic system since ancient times. However, the feudal court never had sufficient control over the vast country in fiscal matters. In most cases, the only link between the local provinces and the feudal court was the tax revenue collected and sent by the provinces to the center, with most of it finding its way into the private coffers of the feudal court. The fall of the Qing dynasty and the establishment of the republic in 1911 did not lead the country toward greater cohesiveness; instead, China spiraled into a chaos with wars between warlords. The Japanese invasion plunged the country further into deep destruction and prolonged chaos. The establishment of the People's Republic has been regarded as a symbol of China's rise against encroachment by the world powers and a farewell to its chaotic past. The Communist Party has had strong control over politics and the bureaucratic workings of the country; however, it has never gained complete centralized control of the fiscal system for a significant period of time. Planning in China had never gained the primacy and precision achieved in the Soviet Union. In terms of economic affairs, China was run more along the lines of the feudal system of the past than like the Soviet model of socialism. This had major bearing on the course of reform China chose during its reform era. Decentralization became the obvious choice for reforms in the early 1980s and has since been one of the key institutional foundations for the ensuing reforms.

2.1 THE ROOT OF DECENTRALIZATION IN THE PLANNED-ECONOMY ERA

The root of decentralization during the reform period can be correctly traced back to China's planned-economy era (1950–1978). Politically, of course, the Chinese Communist Party (CCP) had retained absolute power and control over the country; government officials at all levels were loyal and subject to the party's authority. The party and the government

were not considered as distinct entities, except briefly during the 1950s when a handful of non-party ministers were in office. In the economic arena, central planning was adopted following the Soviet model; production quotas were set for most of the major products and materials; and sales and supplies were controlled by the various industrial ministries in the central government. However, Chinese planning differed from Soviet planning in two distinct aspects—first, there were always areas that were not covered by plans, and second, the fiscal system had experienced several rounds of centralization and decentralization. In peaceful times, central-local fiscal arrangements are one of the most important factors defining a country's institutional setup. This was true even in China's planned-economy era when both political and economic controls were strong in the country. Next, we will first provide a succinct review of China's fiscal system during the planned period, which was characterized by the alternation of centralization and decentralization.

The central-local fiscal relationship during the planned-economy period was rather unstable. At least six waves of centralization and decentralization can be identified for the period 1950–1978 (see Table 2.1). The year 1950 was the first peaceful year during which China could concentrate on economic reconstruction. The central government followed the Soviet model in adopting a completely centralized fiscal system. During the subsequent seven years from 1951 to 1957, when China's first five-year plan was implemented, the fiscal system was revised in two significant aspects—revenue sharing and multilevel management of budgets. This gave local governments some power over their revenues and expenditures. However, the system was still highly centralized because budgetary planning continued to be controlled by the central government. However, fiscal centralization made sense during this period because it coincided with the first wave of industrialization in China. China was a poor agrarian society when the People's Republic was founded in 1949; industrial output was less than 20% of the total output. Faced with an uncertain international environment, the top leadership was determined to ensure that China built its own industrial base to defend itself in case of invasion by a foreign country. In order to achieve this goal, the Soviet model of heavy-industrial development was adopted. With the help of generous aid from the Soviet Union and other Eastern European countries, China completed 156 major heavy-industry projects as part of the first five-year plan. The factories built during this time became the backbone of China's industrial sectors in the ensuing years of the planned-economy era and the early period of the reform era.¹ With a weak government budget, it was necessary for the central government to centrally plan fiscal revenues and expenditures.

1. At the end of the 1970s, there was a debate about the merits of the heavy-industrial development model. The consensus reached then was that, although necessary, the investments in heavy industries were excessive and that this had led to the underdevelopment of light industries. Recently, the heavy-industrial development model has been subject to more criticism.

Table 2.1 Fiscal systems in the period 1950–1978

1950	Centralized revenues, centralized expenditures (<i>tongshou tongzhi</i>) <ol style="list-style-type: none"> 1. All local revenues turned over to the center 2. All local expenditures disbursed by the center 3. Correspondence between revenues and expenditures unclear
1951–1957	Centralized guidance, multilevel management, revenue-sharing by categories and fixed rates (<i>tongyi lingdao, fenji guanli, shouru fenlei fencheng</i>) <ol style="list-style-type: none"> 1. Centralized planning 2. Three levels of budgetary administration 3. Revenue sharing
1958	Decentralized program <ol style="list-style-type: none"> 1. New revenue sources for localities 2. Fixed five-year sharing rates between the center and provinces
1959–1967	Planned revenues and expenditures, expenditures related to revenues, sharing of total revenues, adjustments every year (<i>dingshou dingzhi, shouzhi guagou, zong'e fencheng, yinian yibian</i>) <ol style="list-style-type: none"> 1. Revenue sharing between the center and provinces 2. Annual adjustments 3. Interregional transfers
1968–1976	Cultural Revolution <ol style="list-style-type: none"> 1. 1968: Total centralization (the 1950 model) 2. 1969–1970: Modification of the 1959–1967 model 3. 1971–1973: Fixed base revenue and expenditure, contracting surplus and deficits, annual adjustments 4. 1975–1975: Fixed revenue retention rate, contracting expenditures, sharing above-plan surplus 5. 1976: Modification of the 1959–1967 model
1977–1978	Decentralization Experiments <ol style="list-style-type: none"> 1. The Jiangsu and Sichuan models 2. Experiments related to different revenue-sharing schemes

Source: Wei 2000, 48, Table 3.1; 51, Table 3.2.

For example, Lin, Cai, and Li (1996) believe that the model was unsuitable from the very beginning and a model, termed as “comparative-advantage strategy,” could have been more successful for China. Yao and Zheng (2007; 2008) provide a more balanced view on the heavy-industrial development model in a simulation study based on a dynamic general equilibrium model. The premise of their analysis is that heavy industries have the advantage of providing technical externalities to light industries and that these externalities are larger during the initial stage of economic development. Their simulation results show that while it is necessary to favor heavy industries in the form of subsidies, China’s actual subsidy rate was slightly higher than the optimal rate and subsidies existed for a much longer time than optimally needed.

However, the centralized fiscal system was not consistent with Mao Zedong's vision of a socialist China. In his famous article "On the Ten Important Relationships" published in 1957, Mao identified the central-local relationship as one of the 10 important relationships that China required to manage appropriately. He criticized the centralized system and emphasized a balanced approach that allowed both central guidance and local initiatives. The ensuing Great Leap Forward in 1958 then took a radical turn to decentralize the fiscal system as well as other decision-making processes. According to Mao's vision of communism, each commune should be a self-sufficient unit of production and consumption, and each province should have its own complete industrial structure. The results of the Great Leap Forward, as we are now familiar with, were nothing short of a disaster. Millions of lives were lost in the ensuing three years of unprecedented famine.

Decentralization came to an end with the mistakes made in the Great Leap Forward, and centralization was re-introduced in the three years of adjustment extending from 1963 to 1965. While provinces still shared revenues with the central government, the sharing rates were adjusted every year to reflect the growth of revenues. Revenues exceeding the planned expenditures were transferred to the central government. Provinces with revenues less than the planned expenditures were subsidized.

It is noteworthy that the system implemented during the 1959–1967 period was the most stable and long-lasting fiscal system of the planned-economy era. Although it was a centralized system, it inherited and institutionalized revenue sharing between the central and local governments that had started in the 1950s. This was different from a completely centralized system in which local governments do not retain any of their revenues. Provinces could negotiate with the central government for higher levels of expenditures and in the meantime, try to increase their revenues. Therefore, to a certain extent, incentives were built into the system. Indeed, this served as a benchmark for years stretching to the reform era.

The start of the Cultural Revolution plunged China into the most chaotic period in its recent history. The fiscal system changed almost every year. In 1968, in response to the chaos created by the initial frenzies of the Cultural Revolution, the fiscal system reverted to the 1950 model of total centralization. Subsequently, it was restored to the 1959–1967 model in 1969–1970. The early 1970s witnessed a set of significant changes. The fall of Lin Biao aroused serious doubts among the populace about the value of the Cultural Revolution. The reconciliation of China with the United States and China's return to the United Nations opened a new chapter for China's international diplomacy. Economic reconstruction had been silently reintroduced under the disguise of "continuous revolution." As a result, the fiscal system was decentralized from 1971 to 1973. The most significant change was that provinces could retain revenues exceeding the planned

expenditures under fixed retention rates. This gave provinces much stronger incentives to widen their tax bases. One significant development was the emergence of the rural industry, which we will discuss shortly. However, decentralization inevitably undermined the integrity of the plans, which finally led to recentralization in 1974–1975 when an adjustment program was undertaken under the leadership of Deng Xiaoping. In 1976, the system was virtually reverted to the 1959–1967 model.

The end of the Cultural Revolution brought significant changes in China's central-local fiscal relationships. In 1977, an experiment was started in Jiangsu that allowed a fixed local retention rate of 42% for four years. In addition, Jiangsu could take expenditure-related decisions if its budget was balanced. At the same time, another experiment was undertaken in Sichuan, in which revenues were divided into three categories—central, provincial, and central-provincial shared—and expenditures, into two categories of central and provincial. In addition, contracted sharing schemes were also set up for six other provinces (Hubei, Hunan, Zhejiang, Fujian, Hebei, and Beijing). These experiments opened the door to a truly decentralized fiscal system; the fiscal contracting system implemented in the 1980s and early 1990s was a direct consequence of this wave of decentralization.

In summary, the Chinese fiscal system in the planned-economy era experienced three centralization-decentralization cycles—1950–1962, 1963–1973, and 1974–1978—each of which comprised centralization and decentralization episodes. Perhaps, the decentralization episodes were not greatly significant because of their nature—after all, the central government had strong control even in the most decentralized episode of 1971–1973. However, these played a role in breaking up strict and precise plans that were supposed to be one of the pillars of socialism. The waves of decentralization also provided an institutional foundation for fiscal decentralization in the reform era. Indeed, if decentralization was allowed under the planned economy, why should it not be allowed in an era when China was retreating from the plan?

While cycles of fiscal centralization-decentralization were the most significant feature differentiating the Chinese model of planning from the Soviet one, the coverage of the plan in China was considerably narrower and imprecise. While the Soviet Union had already started using computers, during its planned economy, in the early 1970s, China remained dependent on the use of traditional archaic tools of pencil and paper. The differences were also notable in other areas.

Although the number of products under quota management was large (e.g., in 1984, when urban reform was about to start, there were 1,900 products under the plans of various ministries in the central government [Lin 2001, 72]), and prices were mostly controlled, there had always been a black market, especially for agricultural products. In 1956, with the demise of the so-called socialist transformation—the transformation

that converted most privately owned firms into either public-private joint ventures or purely public firms—private retailers still contributed 7.6% to the nation’s total retail value (Liu and Wu 1986, 159). Private retail businesses flourished again in the early 1960s as a way endorsed by the central government to pull the country out of deep famine. In the 1970s, black markets for farm products emerged in cities to compensate for the deficiency in the state supply of grains, meat, and vegetables. Open cooperatives were established in the communities of some cities to buy fresh vegetables from local farmers and sell them to urban residents.

In the countryside, the commune and brigade system had built-in incentive schemes. After the first model of big communes failed in the Great Leap Forward, the commune system rested on a “three-layer ownership with the production team as the basic unit” (*sanji suoyou, duiwei jichu*). The commune was no longer a production unit; production tasks were delivered to the brigade, which then assigned them to production teams. With a production team, the work-point system was established to record people’s daily contribution to team production. Usually, a healthy adult male was used as reference for the work points that a person could get. While a healthy adult male was eligible for 10 points per day, a healthy adult female usually got 6–8 points. The number of points received was serious business. At the end of each year, a meeting of all the household heads was called to discuss the revisions in the work points of some people or the work points of people newly added to the workforce. This amounted to a serious monitoring scheme to deter shirking because everyone’s work points were subject to scrutiny and could be adjusted downward upon agreement of the majority of the household heads.

In addition to the work-point system, there were other arrangements that provided even stronger incentives. Every family was allowed to retain some privately owned plots to plant vegetables or cash crops; every family was also allowed to engage in home husbandry such as raising pigs, chickens, and ducks. These were the consequences of the lessons learned from the famine. The residual private production was an insurance mechanism against possible failures in the common production.

In the city, state ownership did not cover all aspects either. There were two types of collective firms in the city. One was almost like the state-owned enterprises (SOEs), while the other was supposedly owned by the employees. People working in the latter type of collective firms did not enjoy the kind of benefits provided by the SOEs—health care, pension, children’s education, and so on. Their outputs were also not subject to the plan.

However, the most significant element occurring outside the plan was the rural industrial sector, the predecessor of the township and village enterprises (TVEs) in the 1980s. It began emerging in coastal provinces in the early 1970s when the country tried to recover from the devastation of the Cultural Revolution and proposed to realize the

“Four Modernizations”—industry, agriculture, military, and science and technology—by the end of the twentieth century. By that time, agricultural modernization meant mechanization. Localities with access to technologies, particularly those close to major industrial cities, began to set up workshops to produce agricultural tools and simple machineries. Gradually, this transformed into a wave of rural industrialization in those localities. Indeed, the growth of rural industrial output was faster in the 1970s than in the 1980s (Lin and Yao 2001). The national plan provided neither markets nor material supplies to the rural firms. They were on their own with regard to sourcing technologies, materials, and markets.

The unique features of the Chinese planned economic system led Yingyi Qian, Chenggang Xu, and others to believe that these features were fundamental to China taking a gradual approach to economic reform (Qian, Roland, and Xu 1999; Maskin, Qian, and Xu 2000; Qian, Roland, and Xu 2006). The authors distinguished between the two types of organizational forms: the M-form and the U-form—concepts borrowed from organizational theory. The difference between the forms lies in the manner in which “attribute matching” is conducted. By attribute matching, the authors imply the coordination between different lines of activities. The authors presented their argument in the spirit of Milgrom and Roberts’ (1990b) theory of strategic complementarities; that is, in order to make different lines of activity work toward the highest return or even merely avoid conflicts, their attributes need to be complementary to each other. Then, in the words of Qian, Roland, and Xu (1999, 1086), “An M-form organization is an organization that is decomposed into more-or-less self-contained units where the attribute matching can be done locally. In contrast, a U-form organization is decomposed into specialized units which are not self-contained, and thus attribute matching cannot be carried out locally and is done by the top manager.”

The Soviet model of the planned economy qualifies as a U-form organization because its economy was run by line ministries—ministries in charge of specialized tasks or industries—in the central government. The Chinese model of the planned economy is qualified as an M-form organization because its economy was organized more on a geographic basis; that is, by regional governments. Undoubtedly, line ministries also played a significant role in China’s planned economic system. The difference between China and the Soviet Union lay in China’s strength of local governments, a feature that was lacking in the Soviet model. There had always been a conflict between localities (*kuai*) and the central line ministries (*tiao*) in China’s planned-economy era, and the winner was not always the latter.

Qian and others believe that it is easier, or even compelling, for an M-form organization to conduct gradual reform, and it is easier, again even compelling, for a U-form organization to adopt a big bang reform. An M-form organization allows for easy local

attribute matching in reform design because local governments have more information about it. However, an M-form has a drawback in that it lacks the economies of scale because each local government has to act independently. On the other hand, a U-form organization suffers from the lack of clean information but has the advantage of saving costs for experiments. When the costs of experiments are low, a gradual reform is better than a big bang reform in an M-form organization. When the loss of information during its transmission from local governments to the central government is serious, a big bang reform is better than a gradual reform in a U-form organization.

Although it ignores many historical details, the above reasoning captures one of the core institutional foundations—decentralization—for China’s gradual approach to economic reform and thus has much to recommend. The missing piece of reasoning, however, is the following link: Why should the central government in an M-form organization adopt the most promising local experiment? If one takes ideology seriously, this question becomes an important one. It is certain that efficiency-enhancing reforms; that is, reforms promoting the overall welfare of the society, may hurt the interests of some groups of people who are powerful and resilient and would encounter ardent objection from them. Thus, the success of a gradual reform is not guaranteed. Qian and others provide a normative argument for gradual reform in the M-form, but fail to provide a positive mechanism for the occurrence of a gradual reform.

2.2 DECENTRALIZATION IN THE EARLY STAGE OF REFORM

The decentralization process in the reform era took many forms. At the micro level, it manifested as a shift in the decision-making power from the state to individual actors, be it farm households or enterprises. The rural and enterprise reforms were but two preeminent examples. At the macro level, the decentralization process manifested as the rapid erosion of the planned economy. For example, the number of products under the quota management of the State Planning Commission declined from 120 in 1978 to 60 in 1988 and 33 in 1994, and their share of the industrial output declined from 40% in 1978 to 17% and 3.4% in 1988 and 1994, respectively (Lin 2001, 72). Overall, the number of products controlled by various ministries declined rapidly from 1,900 in 1984 to only 380 in 1988 (*ibid.*). The most significant decentralization, and the one that was most relevant to institutional innovations, was fiscal decentralization that gave provinces more fiscal freedom, and for that matter, higher incentives for local economic growth. Other decentralization measures might provide direct incentives to economic actors, but fiscal decentralization was especially important in that it established the

autonomous roles of the local governments. In China's government-centered political and economic system under the planned economy, governments were the key players to initiate reforms. By making local governments more autonomous, fiscal decentralization enabled decentralized institutional changes.

Before 1994, when the *fen-shui-zhi* tax reform was implemented, China's fiscal system was characterized by diverse and frequently changing revenue/expenditure contracts between the central government and provincial governments. In effect, it inherited the virtue of the model implemented during the period from 1959 to 1967 (Wei 2000), but gave more freedom to provinces. Contracting was introduced partly due to the success of the rural reform, which was well known because of its village-household contracting of land. The central government negotiated different contracts with individual provinces. There were many experiments, and no two contracts were identical.

Table 2.2 lists in a chronological order the major changes that China's fiscal system underwent between 1978 and 1994. In 1978, 10 provinces experimented above-plan sharing schemes with the central government. Different provinces obtained different retention rates for three years: Fujian and Shaanxi, 75%; Zhejiang and Hunan, 55%; Gansu, Jiangsu, and Jilin, 70%; Shandong and Beijing, 40%; and Heilongjiang, 45%. In 1979, Guangdong and Fujian began to enjoy the most favorable sharing schemes by which they turned over a fixed amount of revenues to the central government each year. From 1985 onward, Fujian, instead of turning over revenues to the center, began to receive a fixed amount of subsidies from the center. It is common knowledge in land tenancy literature that a fixed contract provides the highest incentive to tenants because they become the effective residual claimants in such a contract (e.g., Stiglitz 1974). Guangdong and Fujian were the first two provinces where these schemes were introduced. Among the first four special economic zones (SEZs), three (Shenzhen, Zhuhai, and Shantou) are in Guangdong, and one (Xiamen) is in Fujian. Apparently, the central government provided the most favorable contracts to these two provinces in order to boost their chances of becoming successful in opening up economically.

The initial experiments finally led to a full-scale fiscal reform in 1980. Five types of contracts were offered to different provinces (Wei 2000). The first type was the one offered to Guangdong and Fujian that continued to enjoy the benefits of fixed contracts. The second type was offered to Jiangsu that continued to enjoy the benefits of the fixed sharing rule adopted in the initial experiment. The third type of contract was offered to 15 provinces that had a fixed base payment and shared revenue growth with the central government according to a fixed percentage. The fourth, and the most favorable, type of contract was for eight minority and border provinces that received a fixed amount of transfers from the central government. The fifth type of contract was offered

Table 2.2 Major changes in China's fiscal system: 1978–1994

1978	Experiments in 10 provinces <ol style="list-style-type: none"> 1. Planned revenues tied to planned expenditures 2. Center and province share above-plan revenues 3. Sharing rates fixed for three years
1979	Guangdong and Fujian experiments <ol style="list-style-type: none"> 1. Provinces transfer a fixed amount of revenues to the center 2. Contracts fixed for five years
1980	National fiscal reform: Allocating revenues and expenditures, multilevel contracting (<i>huafen shouzhi, fenji baogan</i>) <ol style="list-style-type: none"> 1. Eating in separate kitchens (<i>fenzao chifan</i>): different levels having independent budgets 2. Fixed five-year sharing rates between the center and provinces 3. Five major types of contracts
1985	Modifications: Setting tax categories, fixing revenues and expenditures, multilevel contracting (<i>huafen shuizhong, heding shouzhi, fenji baogan</i>) <ol style="list-style-type: none"> 1. Three types of revenues: central, provincial, central-provincial shared 2. Three kinds of sharing schemes 3. Different sharing rates
1988	Five sharing schemes <ol style="list-style-type: none"> 1. Basic sharing 2. Basic sharing with growth adjustment 3. Fixed contracts of local delivery (fixed sum of transfer to the center) 4. Fixed contracts of local delivery with growth adjustments 5. Fixed contracts of central subsidies
1994	Tax reform (<i>fen-shui-zhi</i> reform) <ol style="list-style-type: none"> 1. Central taxes 2. Local taxes 3. Shared taxes

Source: Wei 2000, 51, Table 3.2.

to the three municipalities—Beijing, Shanghai, and Tianjin. These three big cities got the worst contracts—their retention rates were the lowest among all provinces and were adjusted every year.

These five types of contracts can be further grouped into two broader types—one with fixed payments to or subsidies from the central government and the other with a marginal sharing mechanism. Almost all the western provinces had fixed contracts, with each getting a fixed amount of subsidies from the central government. Guangdong and Fujian were the only two coastal provinces that also had this type of contract.

All the other provinces or cities had sharing contracts. A sharing contract is equivalent to levying a marginal tax on the contractor and thus provides weaker incentives than a fixed contract. The political balance in this case was for the two leading reform provinces, Guangdong and Fujian, to have stronger incentives to move forward; for the western provinces, to balance their budgets (most of them had deficits); and for the remaining provinces, to contribute to the central budget in a progressive way.

The contracting system was modified in 1985 and then again in 1988. While the basic features did not change, most provinces got increasingly higher retention rates with time. Table 2.3 summarizes the changes in the retention rate that each province had between 1980 and 1991. There were enormous variations across regions and provinces, reflecting the nature of decentralized bargaining between the central government and individual provinces.

The three large municipalities and Jiangsu were taxed the heaviest in the central government's budget. Beijing's retention rate was only 28.1% in 1980 and it increased to only 50% by 1988 and stayed at that rate until the 1994 tax reform. Tianjin started with 30.6% in 1980, but was stabilized only at 46.5% in 1988. Jiangsu's retention rates were more stable, starting with 39% in 1980 and ending with 41% in 1988.

The case of Shanghai is especially interesting. In 1984, Shanghai contributed 5.6% to the national gross domestic product (GDP) and 9.6% to the gross value of the national industrial output while its population was barely more than 1% of the national total (Ge 1999). It was precisely because of its significance in the national economy that Shanghai received the worst contract with the central government. Its retention rate was merely 8.6% in 1980 and it increased only to 26% in 1985. From 1988 onward, Shanghai began to pay a fixed amount of RMB 10.5 billion to the central government each year. Although it was made one of the 14 coastal open cities (COCs) in 1984, Shanghai still got the most unfavorable deal with the central government. The contrast between Shanghai and Guangdong clearly shows that the central government was balancing between reform experiments and a continuous flow of tax revenues.

Roland and Verdier (2003) believe that one of the keys to China's successful gradual transition is its adoption of a "reform at the margin" approach by which the state sector is left intact to provide revenues to the government while the private sector is allowed to expand. The same logic applies to China's uneven regional development strategy. It allowed a few frontrunner provinces to experiment and grow rapidly and at the same time, held back other provinces for the purpose of tax revenues.

There were two direct consequences of fiscal contracting. One was the sharp decline in the share of government revenues in national GDP. In 1978, total government revenues accounted for 31% of the national GDP; in 1995, one year after the tax reform, the figure decreased to 11% (Wang and Hu 1999). This is equivalent to a large tax cut, which

Table 2.3 Changes in retention rates: 1980–1991 (%)

	1980	1982	1985	1988	1991
Eastern region					
Beijing	28.1	35.5	48.2	50.0	50.0
Tianjin	30.6	34.9	39.5	46.5	46.5
Hebei	27.2	67.5	69.0	58.3	58.3
Liaoning	30.1	30.0	51.1	58.3	58.3
Shanghai	8.6	10.5	26.0	(10,500)	(10,500)
Jiangsu	39.0	38.0	39.0	41.0	41.0
Zhejiang	13.0	56.0	55.0	61.5	61.5
Fujian	(150)	(150)	[235]	[50]	[50]
Shandong	10.0	48.9	59.0	(290)	(290)
Guangdong	(1,000)	(1,000)	(772)	(14,100)	(14,100)
Central region					
Shanxi	57.9	75.4	97.5	87.6	87.6
Inner Mongolia	[1,168]	[1,414]	[1,783]	[1,840]	[2,160]
Jilin	[300]	[300]	[397]	[110]	[110]
Heilongjiang	[887]	[887]	96.0	(300)	(300)
Anhui	58.1	77.0	80.1	77.5	77.5
Jiangxi	[138]	[138]	[239]	[50]	[50]
Henan	75.4	82.0	81.0	80.0	80.0
Hubei	44.7	69.0	66.5	100.0	100.0
Hunan	42.0	75.0	88.0	(800)	80.0
Guanxi	[297]	[359]	[716]	[610]	[860]
Western region					
Sichuan	72.0	85.0	89.0	100.0	100.0
Guizhou	[526]	[636]	[743]	[740]	[900]
Yunnan	[330]	[525]	[637]	[670]	[710]
Tibet	[496]	[610]	[750]	[900]	[910]
Shaanxi	88.0	100.0	[270]	[120]	[120]
Gansu	53.2	80.0	[246]	[130]	[130]
Qinghai	[402]	[486]	[611]	[660]	[740]
Ningxia	[300]	[363]	[494]	[530]	[590]
Xinjiang	[895]	[1,083]	[1,450]	[1,530]	[1,760]

Source: Wei 2000, 52, Table 3.3.

Note: Figures in () are the amounts of annual fixed payment to the central government; figures in [] are the amounts of annual fixed subsidies received by provinces from the central government. Unit: million RMB.

inevitably had a significantly positive impact on China's economic growth in the 1980s and early 1990s. The second consequence was the decline in the central revenue in total government revenue. At the beginning of the economic reform, the central government controlled almost 100% of the country's government revenue; however, by 1993, the share of central revenue in the total government revenue decreased to 40% (Yao and Yang 2003). These two consequences led two leading scholars, Shaoguang Wang and Angang Hu, to write the influential book *A Report on China's State Capacity* (Wang and Hu 1993), which is believed to have triggered the 1994 tax reform.

The 1994 tax reform was a major step for China to arrive at a stable central-local fiscal relationship. Taxes were divided into three categories: central taxes (mainly resource tax and special consumption tax), local taxes (mainly personal and corporate income taxes, and agricultural taxes), and shared taxes (value-added tax or VAT). Value-added tax was a new tax introduced in the reform. At a rate of 17% on value-added, it was the most important tax. The central government had a 75% share while local governments had a 25% share.² Later in 2003, personal and corporate income taxes also became shared taxes; however, provinces had larger shares.

The reform quickly reversed the two trends under the contracting system. The share of total government revenue in GDP increased to 20% by 2000, and concurrently, the share of the central government revenue in the total government revenue increased to 60% (Yao and Yang 2003). However, the new system also created serious problems.

One was that it had institutionalized the model of unbalanced growth. Under the contracting system, poorer provinces got a fixed contract of subsidies from the central government. Under the new system, these provinces had to transfer revenues to the central government at the same marginal rate as the rich provinces. At the same time, formula-based revenue transfer did not take place, as promised. Instead, regional transfer was done more through projects. However, these projects required matching funds from local governments, which put poorer provinces in a very disadvantageous position because they did not have sufficient financial resources to compete with richer provinces.

Another problem was that this conversion to a universal sharing scheme negatively affected the incentives of the provinces that had previously enjoyed fixed contracts. It is noteworthy that by 1991, all the nine western provinces, six out of the ten central provinces, and four out of the ten coastal provinces had fixed contracts or share contracts with a 100% marginal retention rate (Table 2.3). The sharing scheme deprived the provinces of their role as the residual claimant in their fiscal efforts, and thus, this might have adversely affected their incentives to increase the tax base. The central

2. There were complicated arrangements for rebates that varied from province to province.

government's decision to convert personal and corporate income taxes into shared taxes further worsened local incentives.

The third problem was related to the increased aggregate tax rate. The increased share of government revenues in the national GDP was equivalent to doubling the overall tax rate in less than 10 years. Since the tax reform, the growth of tax revenues has been roughly maintained at a rate double that of the GDP growth; this implies that the government's tax collection efforts have been maintained at a rate steadily higher than that of the GDP growth. The burden is ultimately borne by enterprises and the working population and is thus detrimental to economic growth. Chen, Hillman, and Gu (2002) showed that the tax reform has increased the government's hold on enterprises.

The fourth problem, which has been underscored by Yao and Yang (2003) and has major bearing on the context of this book, is the imbalance between revenues and expenditures shared by local and central governments. The central government's share of revenues and expenditures had reached 60% and 40%, respectively, of the total national revenue and expenditure. Local governments experience more difficulties than the central government in making ends meet. While this is a result of the central government's opportunistic behavior and reflects the imbalance between fiscal decentralization and political centralization, the tighter budget constraints faced by local governments, as we will shortly discuss, have proven to be one of the key factors leading to local experiments in reform.

2.3 DECENTRALIZATION AS AN INSTITUTIONAL FOUNDATION FOR REFORM

Decentralization in the early stage of economic reform set the path for future reforms in China. Except in a few cases, reforms were locally initiated and then gradually adopted nationwide. Local governments played a significant role in initiating new reforms. Decentralization helped economic reforms in the following four areas:

- (1) Local governments received more information than the central government regarding the ground realities.
- (2) Local governments faced more challenges than the central government, among which competition from other localities was the most important one.
- (3) Local governments faced tighter budget constraints than the central government.
- (4) Local experiments helped to minimize the costs of reform and select the best reform to be recommended nationally.

Next, we will discuss these four areas in turn.

2.3.1 Information

It is now apparent, at least to someone with basic social science training, that the information problem is one of the key obstacles to the success of the planned economy and grand social engineering projects. However, it has taken several decades for this obvious lesson to be assimilated by even the brightest minds. In the socialist debate of the 1930s, Oscar Lange believed that the state could perfectly imitate the market to conduct economic planning; that is, to set prices at the desired levels and to assign proper production quotas to enterprises. Lange believed this because the Walrasian general equilibrium can be perfectly described by a solvable set of functions containing only prices of goods as unknown variables. As long as prices can be calculated, correct production quantities can be assigned to different firms provided we know the production technology deployed by each firm; similarly, correct consumption quantities can be assigned to different individuals provided we know their preferences. However, that the state is assumed to know the production technology of each firm and the preference of each individual was exactly what von Hayek believed to be excessive and a gateway for socialist planning to lead to serfdom (Hayek 1944). His warning was ignored 80 years ago, partly because of the initial success of the Soviet Union. It was not until the 1970s, when Keynesian economics faced serious stagflation challenges, that Hayek's warning resonated in both academic and policy discourses and eventually, with the assistance of his monetarist colleagues at the University of Chicago, neo-liberal policies were adopted in the United States under Ronald Regan and in the United Kingdom, under Margaret Thatcher.

On the academic side, it was Leonid Hurwicz who provided rigorous proof of Hayek's claim that the market system is the best in terms of collecting and processing information in order to run an economy (Hurwicz 1969). The market does not have an explicit coordinator; instead, it relies on bargaining by individuals and decentralized information transmission to determine prices and the right equilibrium quantities. What is amazing is that as compared to a centralized mechanism, this seemingly complex mechanism is more cost-effective in terms of collecting and processing information. The key lies in the inability of the center to collect and process information. In order to achieve the precision of the decentralized mechanism under the market, the center has to mobilize as many bureaucrats as the number of individual traders in the market. This is a daunting task. Even if it is practicable, we have to consider information distortion along the bureaucratic chain of reporting to the central decision-making authority.

By viewing the market as a decentralized decision-making mechanism, we can draw an analogy to understand the information advantages of decentralized institutional choices. If central planning does not work because of the lack of sufficient information, centralized institutional changes will not fare much better for the same reason. In a

democratic system, this problem is solved by open debates in the parliament or in the public domain such as in newspapers and on television. In an authoritarian system like the one in China, public deliberation, if any, is far from sufficient. Decentralized institutional choices thus play the role of compensating for the lack of sufficient and open deliberation. In a way, decentralization serves as an information revelation mechanism to extract more accurate information.

In practice, it is difficult for the central government to make the right decisions on the basis of locally reported information. It is an open secret that provinces consistently report much better economic indicators—particularly, higher economic growth rates—than the estimates obtained from the survey data collected independently by the National Statistical Bureau (NSB). While such an exaggeration can be detected by the NSB with relative ease and would usually not cause much trouble, excessive exaggeration during the Great Leap Forward cost millions of lives. At that time, various localities competed to “shoot satellites”; that is, report increasingly higher yields on a limited area of land. However, state grain procurement was set at a fixed proportion of the reported yields; provinces shooting larger satellites ended up sending more grains to the central government, which had actually discounted the reports and set the procurement quotas based on lower yields. The result was that those provinces that had exaggerated more on their grain yields had a significantly larger number of deaths during the famine (Yang 2006).

Decentralized institutional change is a way to avoid the loss of information during its transmission to the center. The key here is that the end results of institutional change are much easier to observe and verify than those of institutional change. This is because reasons are processed by human actors who are inclined to present them to suit their own purposes; however, the end results are more reliable. The central government can compare the end results of different reforms and draw correct inferences regarding the true reasons for the reforms. This is what Daniel Bromley refers to as abductive reasoning; that is, reasoning that starts with an observation, often different from what is expected from a certain setting, and then tries to provide an explanation for it under that setting (Bromley 2006). Decentralization appears to deprive the center of control; however, in effect, it positions it better such that it has more effective control.

2.3.2 Competition

Competition has been regarded by some historians and the like as one of the most important factors for explaining the long-term performance of different countries. For example, in his Pulitzer Prize winning book *Guns, Germs, and Steel: The Fates of Human Societies* (Diamond 1999), Jared Diamond states that the causes of the divergence between China and Western Europe since the advent of the modern age lie in

the different geographies that these two regions are endowed with. China has a long but smooth seashore and relatively flat land; hence, it was easier for China to form a unified country. Western Europe has a long jagged seashore and the Alps, creating geographic conditions for many countries to exist and survive. Competition among these countries then led to innovations. A comparison between Zheng He's voyages to the west and Columbus's discovery of the New Continent is a good example in case. Zheng He had undertaken seven voyages but was then cut off abruptly by the Ming emperor's decision to seal the sea. Columbus was turned down by several European rulers before he finally received funds from the Spanish king. Had Europe been a unified country, Columbus's discovery of the New Continent might have not happened at all. Echoing Diamond's view, Douglass North—when commenting on the divergence between Western Europe and other old civilizations, particularly China and the Islamic world—wrote the following in his new book *Understanding the Process of Economic Change*:

Centralized political control limits the alternatives that will be pursued in a context of uncertainty about the long-run consequences of political and economic decisions. The lack of large-scale political and economic order created the essential environment hospitable to economic growth and ultimately human freedom. In that competitive decentralized environment numerous alternatives were pursued; some worked, as in the Netherlands and England, and some failed, as in the cases of Spain and Portugal; some, as in France, fell between these two extremes. However, the key to the story is the variety of the options pursued and the increased likelihood (as compared to a single unified policy) that some would produce economic growth. Even the relative failures in Western Europe played an essential role in European development. (North 2005, 137–138)

A more recent case of the role of competition in leading to institutional change is provided by Nee and Lian (1994) in their discussion on the Soviet Union and China's turn to economic reform. They argued that it was their failure in the race with the United States and other capitalist countries that had led both the Soviet Union and China to adopt economic reforms that were almost like "sleeping with the enemy"; in other words, the reforms would inevitably lead to the betrayal of the communist cause, similar to what has happened in the Soviet Union.

Within a country, competition can also lead to institutional innovations under a polity with some decentralized features as in the case of China's fiscal decentralization. Competition among government officials of different localities is observed in the two linked arenas of economics and politics. To a large extent, economics serves the purpose of politics. However, unlike discussions on competition between countries that often involve only a single country's welfare, discussions on competition within a country have to consider the welfare of the whole country, which involves aggregation across geographic or group borders. In the latter case, desirable results are not automatically ensured by more competition—a result that has long been illustrated in the

literature. In the case of fiscal decentralization in China, we first note that in poor localities, economics is related to the material welfare and political careers of local officials. Fiscal decentralization forces local government officials to rely on local apparatuses to generate revenues to finance their own salaries as well as local public goods provision. In many poor regions, the salaries of local government officials are not guaranteed. However, it is noteworthy that local governments could head toward one of the two polar directions to solve their financial problems.

One is the strategy of “killing the hen to get the eggs”; that is, to extract more taxes from existing businesses. Although it seems like a suicidal strategy, it may be a natural choice if government officials envision short tenures or if the local economy is in such a poor state that there is no hope for significant improvements in the foreseeable future. To a lesser extent, local governments may engage in “negative competition” in which they set up trade barriers at their borders in order to protect the enterprises in their jurisdictions. For example, Alwyn Young (2000) finds that since the reforms, regional protection has increased in China.

The other and more positive direction is for localities to widen their tax bases. This has been more pronounced in recent years. Because capital is the most mobile factor, it is not surprising that local governments are competing with each other to offer preferential policies to attract investments. This includes deregulation and innovations in new institutional arrangements to attract and accommodate investments. Using a theoretical model, Li, Li, and Zhang (2000) argued that the competition for capital is a reason for local governments to start privatizing the SOEs in their jurisdictions. The SOEs have low efficiency and thus cannot attract sufficient outside investment; privatization improves firm efficiency and thus attracts more investment. Their empirical analysis based on county-level data confirms their theoretical propositions.

Whether a local government adopts the negative or positive strategy primarily depends on two key factors, among several others. One is the tenure of the major officials in a locality. Shorter tenure tends to give officials a short horizon in one locality and thus induces them to adopt the negative strategy. In order for local officials to develop loyalty toward a city or province, it is definitely better to promote them within that city or province. However, longer tenure in one city or province brings with it the danger of local officials building their political networks. This tends to create vested interest groups and political forces against the center, which easily lead to corruption. The recent incidences in Shenyang and Shanghai are but two prominent examples. Both Mu Suixin, the mayor of Shenyang, and Chen Liangyu, the party secretary of Shanghai, built their political careers within their respective cities. In their ascendance to the top of the city leadership, they built strong political patronage ties within their cities and controlled

their cities with the help of their own men. In the case of Shenyang, the city government was run more like a mafia than an open public institution. Weighing the danger of being challenged from below and the prospect of rampant corruption against the possible loss of government efficacy as well as local welfare, the central government opted for granting shorter tenures to local officials. The regional shuffling of local officials has become increasingly common in recent years.

Another factor affecting a local government's choice is the growth prospect of regional economy (Yao 2004b). If the economy shows encouraging signs, it is easier for local officials to adopt longer horizons because there is hope that they would benefit from their efforts. This can easily lead to two opposite cycles—one, vicious; the other, virtuous. Government officials in a backward region would tend to predict a gloomy economic future and would thus be more likely to adopt the killing-the-hen-to-get-the-eggs strategy, which would lead to an even worse economy in the future. This is the vicious cycle. In contrast, government officials in a more economically dynamic region would tend to predict a bright future and would thus be more likely to act in a more lenient way when dealing with the business world, which would then attract more businesses into the region. Thus, a virtuous cycle would be ensured. For the purpose of comparison, when the national gross tax rate (that is, taxed income divided by GDP) approaches 20%, the gross tax rate in Rui'an, a prosperous county-level city in Zhejiang Province, is only 12% (Bhide and Yao 2007).

The possibility of the two polar directions that the local governments may head toward under the pressures of regional competition led Blanchard and Shleifer (2001) to believe that fiscal decentralization alone cannot explain China's extraordinary growth record. Their comparison of the Chinese and Russian fiscal decentralization convinced them that China's success lies in the combination of fiscal decentralization and political centralization, with the latter serving as a check to the negative side of the former, a function that is absent in Russia. Political centralization in China is manifested by the party's tight control over personnel. There is virtually no government official who has ascended to the top of the bureaucracy without the endorsement of the party. This system of centralized personnel management gives rise to intensive competition among government officials at all levels if they wish to be discovered and promoted by the personnel department of the higher-level party organ. In other words, there is a political tournament at each government level (Zhou 2007). Before the reform began in the late 1970s, government and party officials got promoted or demoted mostly because of their political alignment and loyalty. In the reform era, the rules of the game changed dramatically. Political loyalty was still important, but the promotion of government officials became more closely associated with their performance, especially in terms of their contribution in driving the economic growth, during their tenures. This paradigm

change has a lot to do with the changing ideology, a topic that we will discuss briefly here and in more detail later in Chapter 4.

The most important change to the party's ideology in practice during the early stage of economic reform was the shift from a politics-centered agenda to one that focused on economics. The Cultural Revolution had made it difficult for terms such as profits, labor productivity, and sales to even be mentioned in daily life. In circumstances when referring to them was inevitable, some revolutionary jargon had to be placed before them. For example, when production had to be mentioned, one did not use the word "production" alone, but instead said "Continue revolution to promote production" (*zhua gemin, cu shengchan*). The government under Deng Xiaoping sensed that something was amiss about this distorted view of economics and that China would be "ripped off of its global citizenship"—as the saying went at that time—if economic development were not put at the center of the party's agenda. In order to combat the resistance of the conservatives, Deng initiated discussions within the party on the sources of truth. The long sessions of the Third Plenary Meetings of the Eleventh Party Congress held at the end of 1978 had proven to be a decisive victory of the reformers. After the meeting, the party was unified under one common cause; that is, economic growth. We will refer to it as "the growth consensus" in this book. In the last 30 odd years, this consensus has been central to the CCP's ideology; until recently, it had never been challenged within or outside the party.

Under this new ideology, it is natural to find government officials being evaluated based on the records reflecting their efforts at promoting economic growth in their jurisdictions. In a series of papers, Li-An Zhou and others noted that officials belonging to localities with better previous growth records are more likely to be promoted (see Zhou 2007 for a summary of their results). Promotion is not only based on an official's own growth record but also on a comparison with his or her predecessor's record. Such a comparison has the advantage of distinguishing between an official's own efforts and the preexisting good conditions in the jurisdiction—after all, if the preexisting economical conditions are good enough, the growth rate can be high even without the contribution of an official. However, this linkage between relative performance and the likelihood of promotion boosts the competition among government officials, forcing them to work as hard as the mice did at the end of George Akerlof's story of the rat race (Akerlof 1984). The competition has been so intense that many officials have chosen to give up the race and enter business. Some of them have stayed within the bureaucratic setup to cash in on their investment by trading their hard-earned power for money or other favors. However, the overall effect of this heated competition is still positive in terms of economic growth; further, as we have discussed, institutional innovation is one of the tools for local officials to achieve higher economic growth rates.

2.3.3 Budget Constraints

The concept of soft budget constraint was proposed by Kornai (1980) while describing the nature of the socialist firm under the planned economy. A capitalist firm has to operate within the constraints of its budget, regarding the amounts that can be raised by means such as profit retention and borrowing from the bank, and has to foot its losses. On the other hand, if a socialist firm incurs a loss, it can always approach the government for more money because the government assumes paternal duties toward it. As a result, the budget constraints of the socialist firm are never rigid, which according to Kornai is the key reason for its failure. Yingyi Qian and others (Qian and Weingast 1997) borrow this notion in their studies on fiscal decentralization in China and believe that decentralization, among other consequences, hardens the budget constraints of local governments and improves their incentives.

It is undisputable that local governments have tighter budget constraints than the central government. The central government has two major means to overcome its budget constraints. One is to issue national debts, and the other is to negotiate with local governments and ask them to turn in more revenues and foot more expenditures. The Chinese government has generally been prudent in its fiscal policy, which has made financing through national debts easier. The saving rate in China is high; buying government bonds is one of the major investment channels for the ordinary Chinese. On the other hand, the central government always possesses the power to ask provinces to share more of their revenues. Although the share of the central government declined substantially in the 1980s, the 1994 tax reform reversed the trend in just a few years. It is noteworthy that the reform was not institutionalized by a law, but rather delivered by a State Council directive. This gave the central government scope to increase its share in tax revenues. Since the central government took a dominant share of the most important tax, the VAT, local governments began to concentrate on nurturing and collecting personal and corporate income taxes, the two fastest growing local taxes. Then in 2003, the central government made these two types of taxes shared taxes. In addition, the central government was able to lighten its burden by shifting expenditures to the provinces. This was largely because of its authority in deciding the fates of local officials by means of the party. In order to increase his or her chances of being promoted, the best strategy for a local official is to compromise with the central government. On the other hand, the project-based transfer scheme is used by the agencies in the central government as a bait to lure the compliance of local governments—there is always hope that the current compliance will lead to more project money in the future.

The situation is even worse within a province. Unlike the case of central-provincial relationships bound by explicit sharing rules, there is no explicit sharing rule between

the provinces and the cities and counties below. However, political subordination still exists because lower ranking officials depend on the higher ranking officials for their promotions. As a result, financial burdens snowball to the lower rungs, while revenues remain concentrated to higher-level governments. The most financially difficult government unit is the township government. A majority of these units are overstaffed, not because they particularly like to hire people but because they are compelled to hire by the governments above them. There are quotas for local governments to fulfill with regard to providing jobs to veterans and university graduates majoring in agriculture and education. Provincial, municipal, and county governments do not wish to hire them; hence, township governments are forced to do so. In places where the economy is not particularly good, the job situation is worse. As a result, many township governments in the central and western regions are highly indebted.

The key issue is the mismatch between fiscal decentralization and political centralization (Yao and Yang 2003). Fiscal decentralization establishes each local government as an independent fiscal identity; however, political centralization deprives it of autonomy in revenues and expenditures and more importantly, holds local officials accountable to their superiors as well as to their own constituencies. A more sensible fiscal system should comprise two levels of accountability. At the local level, government revenues and budgeting should be placed under the supervision of the local People's Congress; at the central level, the tax sharing rules should be institutionalized by law and should be subject to supervision by the National People's Congress (*ibid.*).

However, it appears that there is also a bright side to this system that lays a disproportionate burden on local governments—it forces local governments to operate under tight and rigid budget constraints so that they have more incentives to engage in institutional innovations. Indeed, some local government officials would adopt the killing-the-hen-to-get-the-eggs strategy—a strategy to squeeze income from enterprises and other businesses. However, there is a limit to this predatory behavior because people will either move to other places or simply stop their operations if the government officials pressurize them excessively. Other local governments may default on loans and payments to banks and contractors, respectively; however, they can only do this to a certain extent because their bad reputation will deter banks and contractors from dealing with them in the future. It is also common for the central government to come to the rescue of provinces, especially poor provinces, when they are faced with financial problems. However, this is, by and large, limited to areas such as teachers' salaries, pension payments, and unemployment benefits that have implications for social stability. Local governments may also bargain with the central government for more transfer revenues and project financing; however, bargaining cannot serve as a way to cover a local government's daily budget. In the end, all the local officials have to face tight budget constraints.

In order to survive and flourish, local officials have to find ways to increase local revenues. Institutional innovation is definitely one of these ways. In fact, it is a relatively easy way. Coming out of the planned economy, there are ample opportunities for local officials to reap gains by breaking the barriers to entry, abolishing rigid regulations, rectifying deficient decision mechanisms, and giving incentives to economic actors—all of which will deliver economic results. Unlike the standard drivers of economic growth, such as investment and technological progress, changing the organization of the economy is often a cheaper way to achieve economic growth. The authoritarian nature of the Chinese government helps to reduce the costs of changes as it prevents prolonged deliberations among the populace. Indeed, this should not be regarded as the “right” way of institutional change regardless of the context. During the initial stage of China’s reforms, this method delivered quick results and the ensuing benefits were distributed in a relatively equal manner among the population. Indeed, many of the initial reforms were strictly Pareto improving; that is, they brought overall gains to the society and did not worsen anyone’s welfare. However, this reform type is becoming increasingly difficult to find in more recent years. Reforms are at best Pareto improving with regard to compensation; that is, they bring net gains to the society as a whole but do not guarantee that individuals will not sustain losses; however, the gains are high enough so that the losses can be more than compensated, should any such compensation be provided. In reality, this type of compensation may not occur or may occur in a circumventing way, or it might take a long time to detect the effects. As a result, it has become increasingly difficult for the society to build a consensus around a particular reform. In other words, the cost of reform has increased.

2.3.4 Experimentation

Qian, Roland, and Xu (2006) have put forth a compelling theoretical model showing that the organizational form—the M-form—of Chinese planning was the key leading to China’s gradual reform. The reality is of course more complicated than what is described in their model. The big bang approach adopted by Russia was more politically motivated than economically driven. It was adopted by Yeltsin and his associates in order to quickly destroy the political bases of the communists (Boycko, Shleifer, and Vishny 1995). As it is now clear, the costs of such an approach were very high. There was no necessity for China to pay such high costs. China did not experience dramatic political changes when it initiated reforms. In a democratic polity, policy changes are always brought about in a piecemeal fashion in order to win the support of the majority. Although China does not follow the standard practice of a democracy, the reformers had to weigh their reform measures against possible rejections from the conservatives.

They required positive results to persuade the conservatives. Therefore, it was safer to adopt a gradual approach to reform. The driving force for the Chinese reform to move forward was the view shared by both the factions—that is, the old system had serious flaws and some action had to be taken in order to rectify them. It was this pragmatic view that led China onto a gradual but successful road to reform.

Decentralization helps the gradual approach by providing a benefit-discovering process. For most economists, the economic agent always has the complete list of alternatives and knows every detail. In reality, people only have limited knowledge about the things around them. They discover things by taking actions. At the very beginning of the reform, the Chinese economists themselves had very limited knowledge about how the markets would work. The debate of “average responses” versus “marginal responses” is a classical example.

The institutional reform in the countryside was coupled by increases in the state procurement prices paid on agricultural products. A dual-track price system was adopted to promote grain production. One component was the base prices that the government paid for grain quotas that farmers had to fulfill. In addition, there was another component—the State paid bonus prices to above-quota sales of grains. This dual-track price system was successful and the country experienced a bumper harvest in 1984. However, amidst the joy, the central government was beginning to worry about its fiscal capacity to pay the bonus prices to above-quota sales of grains. It then announced a policy to abolish the bonus price component and instead pay the average of the base and the bonus prices for all quantities of grain sold by the farmers to the government. The farmers would receive the same amount of income if they still sold the same amount of grains to the government. Those who designed this policy believed that the farmers would only have average responses; that is, they would only respond to the level of their income. Hence, they would sell the same amount of grains to the government. There was a small group of economists led by Guoqing Song who believed that the farmers would respond to the marginal change in the grain prices; that is, they would have marginal responses. Since the price margin was determined by the higher bonus prices, farmers would supply less under the new unified price system. As predicted by the standard economic theory, the result of the policy proved that the marginal responses school of thought was correct—grain harvest dropped by a large margin in 1985.

Chinese economists knew little about modern economics in the early 1980s; hence, textbook lessons had to be learned from practical mistakes. However, even today, when Chinese economists are equipped with more knowledge of modern economics, policy choices are not always crystal clear. Economists may be aware of the mechanisms required for a policy to take effect, but they may not know the quantitative aspect of the effect the policy would have on different groups of people. It is thus up to the

policymakers to decide whether or not to implement that policy. In order to avoid grand mistakes, it is rational to conduct small-scale experiments to determine the true benefits and costs of the new policy and their distribution among different groups of people. The question is whether decentralization helps this type of experimentation. Is it not possible for the central government to conduct these experiments in a centralized system? Qian, Roland, and Xu (2006) ask this question and provide an answer to it, which revolves around information. A centralized system can conduct localized experiments. For example, a centralized system can follow the steps taken by China to create SEZs; it can start changing the ownership structure in several firms. The problem is whether this kind of experimentation would be sustainable. Decentralization puts local governments at the center of institutional innovations. Because localities are fiscally independent, local leaders have the incentive to remain constantly alert for new opportunities. Therefore, decentralization is better suited than the centralized system in providing sustainable institutional change.

In the case of China, local experiments have another advantage over central experiments. There have been some central experiments in China; the most important one is the creation of the SEZs. However, a majority of the reforms have been started in some localities and then sanctioned by the central government. Rural reform and privatization are the two most significant examples. One advantage of local experiments is that they avoid large-scale debates before their commencement. This does not imply that debates are unnecessary for reforms; reform measures should be debated before they are put into action. Local experiments are confined to small geographic locations and may not catch the attention of the general public. This allows them time to fully show their effects, whether good or bad. The Chinese reform is a process that has constantly faced the constraint of the old ideology. In order to circumvent the constraint, it pays to adopt a “do-it-without-saying-it” approach to reform—that is, to conduct the reform quietly without discussing its implications on ideology. The reform can be quietly abandoned if its results are not satisfactory. If it does succeed—for example, productivity is enhanced—the reform can be presented to the conservatives as a success story. In other words, local experiments start with reality and culminate with changes in ideology. In contrast, central experiments in many cases need to change the ideology first before they are put into practice.

Decentralization also helps the discovery process by a contagious process. Imitation can be one component of this process. If an experiment succeeds in one locality, it would be adopted by localities with similar characteristics. The more important component is competition. The success of one experiment in a certain locality imposes competitive pressure on other localities that have to then find new ways to organize their economies. This gives the central government opportunities to observe the pros and cons of

reforms and facilitates its decision to adopt a particular reform. The costs associated with adopting a wrong reform measure are kept low with localized experiments.

2.4 CONCLUDING REMARKS

Decentralization has its historic roots in China's planned-economy period. Chinese planning never attained the precision and scope of the Soviet planned model. This gave China an opportunity to start its reforms from the bottom, symbolized by the return to family farming in Xiaogang Village. Decentralization of the reform era has been a continuation of the decentralization in the planned-economy period. It provided one of the key institutional foundations for Chinese reform.

How relevant is the Chinese experience of decentralization to other developing and transition countries? It is certain that decentralization does not work everywhere. Russia is an example of the failure of decentralization in facilitating economic growth. Other developing countries have not experienced magical economic growth by virtue of decentralization. One reason for these failures is that decentralization makes local state capture easier by lowering the threshold of capture. One example is Indonesia after the fall of Suharto. Chinese decentralization has benefited from the egalitarian nature of wealth distribution in China's early stage of reforms. In a sense, the Chinese experience is a unique case and may not be readily applicable to other countries. However, the spirit of Chinese decentralization may still prove useful to other countries. Some of its characteristics are regional fiscal independence, competition, and experimentation. The most important lesson, perhaps, is a pragmatic approach toward economic reform. The Chinese reform process is often unclear, without a specific direction. However, its end results seem to be good. Decentralization allows many directions and possibilities to emerge at the early stage of reform; however, regional competition weeds out most of them and in the end, the central government selects the most promising direction. There is no settled agenda; things are determined and adjusted along the way. This unorthodox approach may prove useful to other countries.

CHAPTER
3

The Encompassing State

Decentralization provides the institutional foundation for local experiments; however, this alone is not sufficient to steer reform toward a common destiny where the country as a whole progresses toward a better future. In a perfect world—a world in which local governments are not constrained politically, socially, or economically—we have reason to believe that competition and imitation would eliminate inferior institutions. This is because competition would drive a local government to fiscal bankruptcy if it retained inferior institutions. On the other hand, imitation provides a shortcut for local governments to learn the best practices within the country. However, local governments operate under many political, social, and economic constraints. With the exception of a few cases (such as the rural reform), reforms are not without costs; instead, they require local governments to either pay from their own budgets or shift resources that potentially benefit one group of citizens to another group of citizens. Not all local governments have sufficient budgetary resources to pay for reforms, and not all of them have the mandate or capability to reconfigure resource allocation among different groups of citizens. In China's context, local governments have to face ideological constraints, which for many, may be the most significant constraint. Reform, by definition, is an attack on the prevailing ideology in transition countries and will therefore be certainly met with resistance from the guardians of the ideology. There must have been other mechanisms, in addition to decentralization, that led Chinese reform to converge to the market system. This chapter and the next one identify two such mechanisms—the “encompassing state” and “volitional pragmatism.” The first mechanism guaranteed that the best reform experiment was chosen and recommended for the country as a whole, and the second guaranteed that the ideology of the Chinese Communist Party (CCP) adapted to the ground realities such that the reform converged to the market system. This chapter deals with the encompassing state. We start by revisiting the classic work of Mancur Olson, *The Rise and Decline of Nations* (Olson 1982).

3.1 ENCOMPASSING ORGANIZATIONS

Mancur Olson was a great thinker.¹ His writings are detailed enough to capture and present the most subtle arguments to the reader, and at the same time, they are comprehensive enough to offer the reader an understanding of the bigger picture of human history. In his seminal work *The Rise and Decline of Nations*, Olson develops a coherent theory revolving around interest groups to explain the stagnation in post-war Great Britain, imperial China, India, and other countries, as well as the rise of post-war Germany and Japan. He introduces his theory by invoking Anthony Downs' classic work *An Economic Theory of Democracy* (Downs 1957) and his own work *The Logic of Collective Action* (Olson 1965), also a classic, on the paradox one faces in democracy and collective action.

To begin with, people in a large organization face the free-rider problem in collecting and processing information regarding group decisions. "Information and calculation about a collective good is often itself a collective good" (Olson 1982, 25). A member of an organization often faces a conundrum in deciding whether to gather and process certain information regarding a group decision: If the person conceals the information from others, the benefits of this information are very limited because his or her voice only constitutes a tiny fraction of the collective voices in the organization; on the contrary, if the person provides the information to others, he or she is doing the public some good that will help others save the efforts of collecting and processing information individually. As a result, he or she will not actively collect information. According to Olson,

This is dramatically evident in the case of the typical voter in a national election in a large country. The gain to such a voter from studying issues and candidates until it is clear what vote is truly in his or her interest is given by the difference in the value to the individual of the "right" election outcome as compared with "wrong" outcome, multiplied by the probability a change in the individual's vote will alter the outcome of the election. Since the probability that a typical voter will change the outcome of the election is vanishingly small, the typical citizen is usually "rationally ignorant" about public affairs. Often, information about public affairs is so interesting and entertaining that it pays to acquire it for these reasons alone—this appears to be the single most important source of exceptions to the generalization that typical citizens are rationally ignorant about public affairs. (ibid., 26)

"Rational ignorance," a term coined by Anthony Downs, of the average voter creates room for manipulation by the informed minority—namely, organized interest groups

1. Mancur Olson (1932–1998) was an economist working on problems related to collective action and interest group politics. He made significant contributions to the theory of collective action, economic development, and public economics. He was one of the few prominent economists who made significant impacts beyond the field of economics.

and people with proximity to power—in a democracy. These entities have selective incentives in public policies because their positions in society are asymmetric to the position of the average citizen. In other words, their active participation in public affairs would yield a higher marginal return than a similar effort on the part of the average citizen. Under these circumstances, democracy can easily fall prey to group interests and elite manipulation. Olson then proceeds to develop nine implications of his theory. It is worthwhile to recapitulate them at this point (*ibid.*, 74):

1. No country will be able to realize symmetrical organization of all groups with a common interest and thereby attain optimal outcomes through comprehensive bargaining.
2. Stable societies with unchanged boundaries tend to accumulate more collusions and organizations for collective action over time.
3. Members of “small groups” have disproportionate organizational power for collective action, and over time, this disparity diminishes but does not disappear in stable societies.
4. On balance, special-interest organizations and collusions reduce efficiency and aggregate income in the societies in which they operate and make political life more divisive.
5. Encompassing organizations have some incentive to make the society in which they operate more prosperous, redistribute income to their members with as little excess burden as possible, and cease such redistribution unless the amount redistributed is substantial in relation to the social cost of redistribution.
6. Distributional coalitions make decisions at a slower pace than the individuals and firms that comprise them; further, they tend to have crowded agendas and bargaining tables, and more often fix prices than quantities.
7. Distributional coalitions slow down a society’s capacity to adopt new technologies and reallocate resources in response to changing conditions, and thereby reduce the rate of economic growth.
8. Once large enough to succeed, distributional coalitions become exclusive and seek to limit the diversity of incomes and the value of their membership.
9. The accumulation of distributional coalitions increases the complexity of regulation, the role of the government, and the complexity of understandings, and changes the direction of social evolution.

The above implications, especially points 2, 4, 6, 7, and 9, can be used to explain why Great Britain witnessed stagnation after the Second World War. Britain is the longest surviving democracy in the world, and there has been no major disruption in its democratic history. As a result, it has developed the most stable interest groups among

the democratic countries (Implication 2). These interest groups are more concerned with redistribution than growth, and as a result, Britain has maintained a low growth rate (Implication 4). In order to acquire more shares, the interest groups compete with each other via bargaining and political campaigns (Implication 6), which divides the society, slows down decision making (Implication 7), and leads to complicated regulations (Implication 9).

These implications are not only applicable to democracies but also to non-democratic regimes. Olson uses them to explain the formation and maintenance of the caste system in India and the stagnation of imperial China. The caste system was based on professions and originated more than 2,000 years ago. At that time, people in prestigious professions, particularly priests, wanted to monopolize their line of work so that their children could automatically inherit these professions without any effort. They used their superior knowledge and writing skills to create castes that, in effect, cemented every person and his or her children to a particular profession. As a result, Indian society lost its upward mobility and only served the interests of a small section of people at the top of the caste system. As compared to India, ancient China was much more upwardly mobile as the *keju* system offered everyone the opportunity to rise up the social ladder through a series of civil exams. However, the alliance between the royal court, bureaucracy, and merchants created a power group that monopolized the income sources in the country.

Of all the implications described above, the one that is most relevant to the current context is Implication 5, which concerns encompassing organizations. Olson defines encompassing organizations as “those that encompass a substantial portion of the societies of which they are a part” (Olson 1982, 47). That is, they are organizations that represent a significant share of the population in a country. What makes them unique is that “the incentives facing an encompassing special-interest organization are dramatically different from those facing an organization that represents only a narrow segment of society” (ibid., 48). This can be illustrated by two related arguments. First, because it represents a significant portion of the population, an encompassing organization is more interested in the growth of the national economy than other organizations that only represent a very small portion of the population. For example, if one-third of the population belongs to one organization, this organization then has a one-third stake in the national economy. As a result, such an encompassing organization will be less likely to introduce anti-growth policies. Second, the encompassing organization will also be less likely to tolerate heavy costs imposed by excessive redistributive policies, again because it represents a large portion of the population—if it represents one-third of the population, its members will have to foot one-third of the costs.

Olson notes that the size of an organization is not the decisive factor in determining whether or not it is encompassing. He uses the example of a labor union that represents all the workers in a specific firm. This labor union is small relative to the size of the society. Since wage payrolls constitute a large part of the value-add created by the firm, there is no reason for the union not to care about the growth of the firm. One may argue that since the wage rate is decided by the external labor market, workers have nothing to do with the firm's growth. However, the very existence of the labor union in the firm demonstrates that it indeed has some bargaining power. Therefore, workers' compensation can be linked with firm growth. The union thus has the properties of an encompassing organization because it helps to promote the firm's growth and in a way, the growth of the entire economy. This can be contrasted with a craft union that only includes workers with specific skills required by the firm. Because its members constitute only a fraction of the firm's workforce, such a union may not have an interest in the firm's overall growth.

"The foregoing logic therefore suggests that the efficiency of firms and industries can be influenced by whether or not the relevant institutions for collective action are encompassing in relation to them" (ibid., 49). This quote has the potential to extend the notion of encompassing organizations to areas where the "relation" is not defined by the number of people the organizations represent, but by the linkage between their interests and those of the entity that they encompass. This provides us with a more flexible notion of encompassing organizations. In the next section of this book, we will extend this notion to the encompassing state.

3.2 THE ENCOMPASSING STATE

In order to extend the notion of encompassing organizations to that of encompassing states, we first note that a state itself is a collection of organizations and can assume many forms. In a country characterized by absolute despotism, the despot seems to be the state. However, even such a despot cannot blindly ignore his or her subjects' views and actions; he usually fabricates stories to make his subjects believe in his rule. In a modern democracy, the power of the state is usually shared by the executive, the legislature, and the court. In addition, citizens exert their influence on the state through various channels. Between despotism and complete democracy, there are many intermediate forms of state; authoritarianism in China is but one of them. However, the common feature among these numerous forms is that the power of the state is contested and even shaped by many organizations. We study the state instead of the government precisely because we wish to study the dynamics of policy formation in the presence of different actors, of which the government is but one. The characteristics of a government can

be quite different depending on the nature of the state. In a more authoritarian state, there is more overlap between the government and the state because the former is more autonomous with respect to the society. However, in a more democratic state, the government is more constrained by the interplay between different organizations and interest groups. Therefore, in order to study the government, it becomes necessary to study the state; that is, the mechanism of governance in a country.

However, for narrative ease, we will more or less treat the state as a single actor in subsequent discourse. It is worth noting that by state behavior, we always refer to the outcomes of the interactions among different stakeholders who are part of the state construct.

Further, by an encompassing state, we refer to a state whose interests largely overlap with the overall welfare of the society. In this case, the term “welfare of the society” can either imply overall economic growth or other goals that the society as a whole desires. One such goal is to extend the benefits of growth to as much of the population as possible without compromising on the income growth of any segment of the society. In other words, the encompassing state seeks Pareto improvement for the society. There are many such opportunities in a society, particularly in the initial stage of its economic development. Consider the example of China’s exchange rate regime that is the topic of heated debate within China as well as outside in the international sphere. A flexible exchange rate regime gives the monetary authority the freedom to stabilize the economy with relative ease. However, a flexible exchange rate regime at the current stage would certainly imply an appreciation of the renminbi. This will undoubtedly increase the wealth of the people who can afford to purchase imported goods and travel abroad—admittedly, only a small fraction of the Chinese population. For the vast majority, however, such an appreciation will have either no effect or adverse effects. The latter will be particularly true for the 140 million rural migrant workers, a majority of who work in export-related industries whose growth will inevitably slow down due to RMB appreciation. Therefore, adhering to a managed exchange rate regime helps people at the bottom rung without seriously compromising the income growth of the top segment of the population.

The notion of encompassing states is reminiscent of the notion of developmental states derived from the East Asian model of economic development. A developmental state is one that puts economic growth at the top of a country’s agenda and organizes its resources toward that goal. To the extent that economic growth benefits the society, a developmental state is an encompassing state. However, economic growth may not be the sole objective of a country, and in many cases, pursuing growth may compromise other goals that the society values and that an encompassing state should duly subscribe to. In other words, the notion of encompassing states is a far broader and richer concept than that of developmental states.

There certainly exists a gap between encompassing organizations and an encompassing state. The state may not be encompassing even if most organizations are encompassing relative to the specific arenas in which they operate. For example, there can be many industry-specific chambers of commerce that are encompassing in relation to their respective industries; however, this does not mean that they are encompassing vis-à-vis the society. The number of organizations contesting for state power may not be a critical factor in determining whether the state is encompassing. It seems that it is easier to have an encompassing state if there are only a few organizations. However, it is likely that these few organizations still have very diverse interests and may compete with each other to obtain favorable policies from the state. On the other hand, a society with a large number of organizations can also have an encompassing state—as long as the governance mechanism either induces them to converge to what the society as a whole desires or ensures that those ideas that work for the good of the society prevail. Therefore, a democracy can have an encompassing state. The Nordic countries come closest to such a democracy.

Indeed, a democratic state is, by definition, an encompassing one. The core of democracy is to hold the government accountable to the constituency. If the discrete points are considered, it may be found that the majority rule delivers results to certain majority groups and discriminates against certain minority groups. In the long run though, the majority rule will produce results that benefit the overall majority of the population provided the benefiting majority groups are distributed randomly at each discrete point. However, in reality, this may not be the case. For example, the existence of interest groups, as forcefully argued by Olson, may lead democracy to systematically produce results that are against the long-term interests of the majority. Since the focus of this book is not democratic states but, rather, the authoritarian State in China, we will not discuss how a democratic state becomes encompassing. Instead, we will concentrate on the conditions that would enable an authoritarian state to become encompassing. For this purpose, we identify the following four factors that could steer a state in this direction: concerns regarding legitimacy, political alignment, ideological convictions, and external competition.

3.2.1 Legitimacy

A state may be concerned with its legitimacy because its existence has not been acknowledged by the law or the underlying social norms of the society to which it belongs. The military can propel an organization to power; however, it does not provide it legitimacy. Although people may appear subdued, they may in fact harbor resentment toward the military rule. In a democratic society, the ruling party obtains its legitimacy from the

democratic procedures that the whole population agrees to follow in order to elect its officers. In other words, the legitimacy issue is circumvented. Political parties can still be encompassing—not with regard to legitimacy, but rather to win maximum possible votes. Due to this, the incentive of the political parties to deliver performance to the society may become weaker in a society where the internal efficacy of the voters is low or where information can be easily manipulated. In contrast, in a society where the political or social institutions do not predetermine the procedure for the ruler to gain legitimacy, the quest for legitimacy may force the ruler to deliver performance to the society.

The first emperor of a Chinese dynasty is a good example. In terms of the number of people he represented, an emperor was definitely not encompassing relative to the society. However, a new emperor always came into power through a violent upsurge that dethroned the emperor of the previous dynasty; this was often regarded as a crime in traditional Confucian teaching. That is, the legitimacy of a new dynasty was often questionable in its early years. In order to gain legitimacy, the first emperor, and perhaps several of his successors, had to provide tangible benefits to the society to win the support of the gentry as well as the peasants. In this way, these emperors became encompassing relative to the society. This may explain why the reign of the first few emperors was always the golden period of a dynasty. Once the legitimacy issue was resolved, the emperors became very self-serving, often indulging in extravagant consumption including housing hundreds of concubines in their backyard. The dynasty itself began to wane until it was finally replaced by a new one in another violent upsurge.

The above scenario does not imply that an authoritarian state would automatically deliver performance out of the fear of legitimacy. After all, there have been many failed authoritarian states in the world. There must exist other factors that determine whether a state could become encompassing. What the author would like to emphasize here is that different sources of legitimacy lead to different levels of performance. A democratic government obtains its legitimacy from a set procedure; we refer to it as “procedure-based legitimacy.” An authoritarian government does not obtain its legitimacy from such a procedure, but from its performance—that is, what it delivers to the population; we refer to this kind of legitimacy as “performance-based legitimacy.” An observation of developing countries shows that there are many democracies that have not managed to grow in the last 50 years; however, some authoritarian countries have managed to catch up with the developed world within a relatively short period of time. This is a puzzle that begs an explanation from social scientists. In the last chapter, we will develop a new approach—the procedure-performance approach—to analyze state governance and its relationship with a country’s economic performance. We believe that this new approach

would enable us to finally understand the democracy-dictatorship dichotomy and reach a better understanding of the puzzle.

3.2.2 Alignment of Powers

Let us begin with an interesting explanation presented by Yuyan Zhang and Cheng Gao for the stagnation of old China as compared with the rise of England (Zhang and Gao 2005). The commonly accepted view about England's rise was the one provided by North and Thomas (1973) and North and Weingast (1989); that is, England became the world leader in industrialization because it had established a set of institutions that provided the right incentives to private agents, particularly after the Glorious Revolution. Zhang and Gao provide another explanation. Their premise is that the growth of a country is dependent on whether the economically dominating class is also politically dominating or forms an alliance with the politically dominating class. If so, the government is more likely to create policies favoring the economically dominating class. As long as this class is the driving force of economic growth, it would in turn help national growth. While it clearly is not a good fit to what has happened in the Latin American countries, this argument has appeal in explaining the contrasting historical occurrences in China and those in England after the Glorious Revolution. To begin with, the English Revolution in the seventeenth century was centered around the king and the newly emerging commercial class. The Glorious Revolution in 1688 claimed the final victory of the commercial class by limiting the power of the king and widening the power of the parliament and the common law court, both of which came under the control of the commercial class. The ensuing rapid development of commerce and supporting institutions and institutional reforms such as the Price Revolution, the establishment of the Bank of England, and the development of financial markets benefited the commercial class. However, in China, the commercial class had never forged a stable alliance with the emperor, let alone itself becoming politically dominating. This was related to China's lack of aristocracy. While a member of the English commercial class could be appointed as a lord or a duke with the title passed down to successive generations, these titles were exclusively reserved for members of the royal family in China. The most secure way for a businessman to gain political power was to force his sons to rise up the ranks of political elites through the tedious and in many cases, extremely time-consuming *keju* exams—the civil exams that had existed in China for more than 1,000 years before they were stopped in the early 1900s. Since the chances of acquiring *jinshi*—the title required by the royal court to assign an official position—were very small, many youngsters from rich families ended up wasting their lives in preparing for the exams. An old Chinese saying *fu buguo sandai*—a family cannot be rich for more than three generations—fits

this situation quite accurately. A reason cited for this was the inability of the offspring to run the family business because they endeavored to get enlisted by clearing the civil exams. According to Zhang and Gao, this high cost had another devastating effect on the economic growth in old China. People who finally got enlisted always wanted to recoup their costs through excessive extraction from businessmen and peasants. Corruption was the rule of the game in official circles. The upside of the civil exam system was that it made old China a society that had the highest class mobility in the world; its downside, however, was that it created a group of *liukou*—“mobile bandits”—who looted and did not care about the future of a particular place. The nobility in England could have also been corrupt in nature, but it was more like *zuokou*—“resting bandits”—who stayed in one place and thus were more likely to care about the future because they wanted to have a continuous stream of taxes paid by their subjects. Therefore, the royal family and the nobility in England were much more encompassing relative to the society than the royal family and its bureaucracy in China. This could explain the great divergence between these two societies in modern history.

The above explanation, although compelling, may not stand close scrutiny when counter examples are presented. A look at the recent world history reveals more examples of failed alliances between the business and political elite than successful ones. In most developing countries, this alliance has cemented monopolistic self-serving ruling groups unconcerned with the overall long-term welfare of the society. What is missing in Zhang and Gao’s (2005) argument is why the business elite would not take advantage of their monopolistic positions to seek easy gains—that is, snatching from the society—instead of more difficult gains obtained only through costly investment and arduous efforts, irrespective of how productive they were. The key may not be whether there exists an alliance between the political elite and the productive class, which itself is difficult to define in many cases, but whether the ruling coalition is disinterested in the society. We use the term “disinterested” to describe a situation where the ruling coalition does not have special preferences for any group or section of the society (Yao 2008b). For such a ruling coalition, the best way to consolidate power is to extend the benefits to as much of the population as possible; thus, it is more likely to become encompassing relative to the society. In the appendix to this chapter, we show that a disinterested government—defined as a government that treats different groups equally—is more likely to emerge in a more equal society. This is so because in a more equal society, the government’s forming an alliance with any group of people invites the danger of being overthrown by a coalition of other groups, whereas in a more unequal society, forming an alliance with the strongest group provides assurance for the government to remain in power.

The performance of Chiang Kai-shek and his Nationalist Party in the mainland and Taiwan offer a good example. The Xinhai Revolution overthrew the Qing dynasty and

established a republic in China. However, the Chinese social structure was not modified; the landlord class was still the dominant class. In the city, businesses were closely tied to the political elite, partly because they wanted protection from appropriation by the warlords. Sun Yet-sun realized the problem and proposed the formation of an alliance between the Soviet Union and the CCP to help the working class. However, his early demise halted the implementation of this policy. Chiang quickly consolidated power within the Nationalist party and steered the party to form an alliance with the landlord class and urban businesses. This alliance made the Nationalist Party reluctant to take action to change the social and economic structure, which was widely considered by the intellectuals and informed members within the Nationalist party as inadequate for modern China. One example is land reform.

Although land distribution in many regions was fairly equal, powerful landlords in certain areas owned large tracts of land. In the Yangtze Delta area, there were many absentee landlords who owned land in the countryside but lived in the city. They were not concerned with agricultural growth as long as they received their rents. Interlinked contracts of land and credits were common. The classic work of Xiaotong Fei (Fei 1983) and the recent work by Xinsui Cao (Cao 1996) show that these contracts were a significant factor that drove tenant families into deep poverty. The irony is that the deprivation of the peasants made investing in land ownership more profitable than investing in industry. Poor tenants were forced to work very hard on small pieces of land. In the words of Chayanov—they were exploiting themselves.² Their self-exploitation increased the output of land, which in many cases benefited the landlords more than the tenants. This also reduced the landlords' incentives to introduce new agricultural technologies. As a result, agriculture became stagnant. Chiang realized the problem, but his alliance with the landlord class rendered a land reform impractical. This was in contrast with what he undertook in Taiwan. The Nationalist Party retreated to Taiwan after it was defeated by the Communist Party in the mainland. Three million people migrated to Taiwan along with Chiang; many of them held official positions. While they had strong connections in the mainland, this was not the case in Taiwan. Indeed, the Nationalist government became what we term an outsider government (see Appendix), which is more likely to become disinterested in the society than an indigenou government, or an insider government (see Appendix). This turned out to be good for the changes Taiwan would soon embrace. The first thing Chiang did upon arriving in Taiwan was the implementation of the land reform. It was not a coincidence that Chiang's land

2. Chayanov was a Russian/Soviet economist who studied the situation of the Russian peasants after the Russian communes were dissolved. While Lenin believed that Russian peasants were polarized by class, Chayanov believed that there was only demographic divergence. He was purged and killed by Stalin in 1939. For more details, see Chayanov [1925] 1996.

reform occurred simultaneously with the land reform in the mainland. The only difference was that Taiwan's land reform was peaceful whereas that of the mainland was accompanied by ruthless suppression of the landlord class in many cases.

The above instance shows that a disinterested political power is more likely to become encompassing relative to the society. Chiang had learned from the defeat in the mainland. When he was in the mainland, Chiang allied with the landlord and the business class and ignored the peasants because he and his extended family were a part of that class. This gave the Communists a chance to mobilize the peasants against Chiang's regime. When he arrived in Taiwan, Chiang was disinterested in the Taiwanese society and hence, became more encompassing.

3.2.3 Convictions of the Ruling Organization

The third factor that could lead to an encompassing state is the stand adopted by the members of the ruling organization toward the society. The American Fathers were a small group of people. They neither had a legitimacy issue nor did they represent a certain class. They incorporated the right clauses into the American Constitution only because they were driven by a strong conviction to build a free, fair, and strong America. In every society, there are people who treat the fate of their nation seriously and some of them are even ready to make the ultimate sacrifice for it. They would become more encompassing than others if given a chance to rule the country. In addition, some cultures place greater value on society than on individuals; organizations in societies with such a culture are more likely to become more encompassing than those in societies that place a greater emphasis on individuals.

3.2.4 Outside Competition

The last factor that could lead to encompassing states is outside competition. Let us take a look at the example discussed by Olson of a craft union in a certain industry. Usually, a craft union has narrow interests relative to firms and industries as a whole. Now suppose that foreign firms within the same industry began selling products in the domestic market as a result of trade liberalization. This puts a huge pressure on domestic firms who have to make budget adjustments including cutting workers' wages. Under this circumstance, it is difficult for the craft union to continue bargaining for better salaries for its members; it may even have to agree to get their salaries slashed. That is, the interests of the craft union converge with those of the firms and the whole industry, although this may be temporary. Outside competition can also unify factions within a country on certain important policies. The Communist Party in the State of West Bengal in India is a good example. It had been the ruling party of that State for a long time and had

adhered to its pro-peasant policy until recently when cheap goods from China began to flood the markets. A dramatic turn that it made was to invite the automotive company Tata to set up an automobile plant in the State on land acquired from peasants. This move, of course, invited a flood of criticism from both the left and the right. Peasants also staged demonstrations. However, the West Bengal government was steadfast in its decision—at least in the initial stage—and dispatched the police force to suppress the demonstrators. It is difficult to imagine that in the absence of external competition, the Communist Party in West Bengal would have even considered changing its long-held conviction of pro-poor policies.³

The above extension of Olson's theory of encompassing organizations will prove critical for us in explaining why the CCP has thus far been an encompassing organization. We will trace its roots to the CCP's concern regarding legitimacy after a series of mistakes it made in its first 30 years of ruling, its failed economic competition with the capitalist societies, the history of China since the Opium War, and the CCP's position as the single most important political force in China.

3.3 THE CHINESE STATE AS AN ENCOMPASSING STATE

The Chinese State has been an encompassing state for the last 30 years. We infer this from the outcomes of China's institutional transformation and economic growth. With the exception of a few reforms (such as the rural reform), most reforms involved the reconfiguration of gains and losses in the society. Therefore, it is a wise strategy to form coalitions that help to push reforms forward. Most of the time, the Chinese government was disinterested in the welfare of different interest groups and put the long-run welfare of the Chinese people as its top priority. Since the CCP has been the single dominant political force in China, the encompassment of the State largely coincides with that of the CCP. Hence, we will use the terms Chinese government and the CCP interchangeably.

D. Yang (2006) argues that the rural reform was the peasants' response to the famine during the Great Leap Forward (for more discussions, see Chapter 7). To the extent that there was an imminent possibility of another famine because of the shortage of grain supply in the mid-1970s, Yang's assessment is basically right. However, he also admits that the CCP leadership, especially its branches at the county and provincial levels, had played an important role in pushing the reform forward. To quote Yang's concluding remarks about the role played by local elites in rural reform, "In short, while the rural reform initiatives, as embodied in the household responsibility system, originated from

3. The Tata Group, however, has since moved the project to the State of Gujarat on account of the West Bengal government's yielding to protests of the peasants, rights groups, and other political parties.

below, in the beginning, support from local and regional leaders often proved crucial to their spread” (ibid., 157). Yang intentionally omitted the role of the central leadership. However, based on the account of Du Runsheng (Du 2006), the veteran agricultural policymaker in the CCP, one gets the impression that policy changes at the center had at least expedited the reform process. For example, one critical point of the reform was that in the spring of 1980, the central government allowed *baochan daohu*—contracting output to households, an early form of family farming—to be adopted in all poor regions. This policy opened up a window for family contracting to spread to the actually “not-so-poor” regions because “poverty” was not clearly defined at that time (China began to have poverty lines in the mid-1980s). China’s transition has taken a gradual approach, but this does not imply that the central government has been completely passive in sanctioning local initiatives. In some cases, it took bold steps. The most significant example is China’s accession to the World Trade Organization (WTO). There was not much discussion before China signed its bilateral agreement with the United States. However, this move was not without controversies. Many scholars deemed it a hasty move because China had not fully understood the impacts of WTO accession. However, the results turned out to be positive although with some painful adjustments.

The most important role played by the CCP has perhaps been its ideological transformation along the road to reform. We will address the CCP’s ideological changes in the next chapter; here, we would only like to emphasize that without the CCP’s pragmatic attitude toward its ideology, it is difficult to imagine that China could have finished its reform. This is evident in the adoption of family farming, privatization of state-owned enterprises (SOEs), and abandonment of the planned economy—all of which shook the central pillars of the Stalinist socialist model.

Some people may ask: “Why the CCP? Couldn’t Chinese reform have proceeded without the CCP?” But this question is ahistoric because it ignores the Chinese reality at the time of reform. Unless one accepts the kind of state collapse experienced by the Soviet Union, it is difficult to imagine that Chinese reform could have reached completion without the important role played by the CCP.

On the economic front, there seem to be stronger reasons to believe that China could have reached its growth record without the involvement of the CCP. As some would argue (e.g., Perkins 2005), China has shown rapid growth because it has followed all the steps recommended by the standard economic theory. However, the question is: Why China? The standard recommendations are common knowledge; but why have only a handful of latecomers—among which China is a significant one—adopted them? In order to answer this, we have to retrace the political economy behind the adoption. It is at this stage that the CCP played a critical role. There are definitely many different interest groups in China, and the CCP has had to strike a balance among them.

In some cases, noticeably in the privatization of the SOEs, it had to weaken its own traditional power base in order to push forward policies that were good for China's overall and long-term welfare. In retrospect, one finds that although the road has been rough, China headed in the right direction, taking rapid strides in terms of economic growth. This is a tremendous success and one has to give credit to the CCP's leadership.

The encompassing nature of the Chinese State during the reform period can be best summarized by the growth consensus held by the CCP. At the outset of the reform, Deng Xiaoping did not discuss institutional reform, but simply called for "shifting the gravity of every piece of work to economic construction." From then on, the growth consensus became the central ideological conviction held by the CCP. It was aimed at both—rectifying the political hysteria of the Cultural Revolution as well as the resurgence of China as a great nation. In practice, this consensus has accomplished several things—some planned and some unplanned.

Its first accomplishment was unifying the party and the country. After the dark years of the Cultural Revolution, people were disillusioned with the political rhythm and needed a new direction. The CCP itself was divided. Hua Guofeng, despite being milder than the ultra-radicals of the Cultural Revolution, still held fast to Mao's legacy and took China further down the radical direction. Deng Xiaoping and other moderates believed that changes were needed but did not want to have a head-on confrontation with Hua. Shifting the party's emphasis to economic construction would lead to changes in the system, but at the same time, it would preempt any objection from the radical camp. It was a clever move that benefited China's actual needs and garnered the support of the radical camp. The growth consensus not only reunited the party but also gave the Chinese a new direction and hope for a better life.

The second accomplishment was in the area of system changes. Some of these changes were envisioned and planned by the moderate camp; for example, the increase in agricultural prices was a planned move to stimulate grain production. However, many were unanticipated. The return to family farming was not planned, but since it brought about an increase in output, it was accepted and even encouraged by the CCP. The rise of the rural industry and the privatization of the SOEs were other examples. Once the objective was set, institutions became a tool to realize it. The growth consensus brought economic efficiency to the forefront of the objectives pursued by the Chinese government. In addition, this objective was easy to observe and measure and could thus be easily applied to direct system-wide changes. As a result, Chinese reforms qualify for what North calls a kind of "efficient institutional change."

The third accomplishment was related to the change in the CCP's ideology. A natural extension of the growth consensus was to give people incentives to work hard, which then immediately led to the corollary that some people could become richer faster than

others. This was a hard blow to the CCP's long-time conviction of an equal society, but the growth consensus watered down this conviction. After 30 years of evolution, the present-day CCP is hardly a party built on political ideology. The upside of this transformation is that it has helped China complete the economic reform and achieve rapid economic growth; the downside is that the CCP itself would get dissolved into the State bureaucracy and consequently, lose its identity. This is of course not an intended consequence of the growth consensus. In order to maintain the CCP as a coherent party, some form of its original ideology has to be revived.

The growth consensus has other unintended and undesirable consequences such as environmental degradation, inequality, and the commercialization of local governments. An in-depth discussion of these consequences would be a digression from the theme of this chapter. We will return to the topic in the final chapter. In conclusion, it is worth emphasizing that the growth consensus has served China well in the last 30 years. However, like most commitments, stagnation would turn it from a virtue to a vice.

It is noteworthy that the growth consensus is not the only feature of the encompassing State in China. The notion of a harmonious society proposed by the CCP in 2006 signaled an important departure from the single-minded version of the growth consensus. Aiming at a more inclusive and protective approach to economic growth, the call for building a harmonious society would lead to more investment in the countryside (through the Socialist New Countryside Movement), health care, pension, and environmental protection. That is, the Chinese encompassing State is not merely a developmental state that focuses solely on economic growth. To the extent that social development and equity are also valued by the society, the Chinese encompassing State is consciously following the path to advance the long-term interests of the society.

3.4 CAUSES FOR THE ENCOMPASSING STATE IN CHINA

What has made the Chinese State an encompassing organization in the reform era? Based on our discussion in Section 3.2, we can list five factors to support our answer—two, contemporary, and three, historical. Since the CCP has been the dominant force in the Chinese State, we will focus on how these factors have led the CCP toward becoming an encompassing organization.

The two contemporary elements concern the legitimacy and failed economic competition with the capitalist societies. To begin with, let us address the legitimacy issue. The CCP was considered to be a legitimate organization when it took power from the Nationalist government, which was widely believed to be entrenched in corruption and incompetence. With almost unanimous approval from the population, the CCP could

complete the land reform and then quickly move to collectivization without much resistance from the peasants. It was also able to complete the socialist transformation of the capitalist firms overnight without much resistance from the capitalists. However, a series of mistakes starting with the Great Leap Forward in 1958 led to an unprecedented famine from 1959 to 1962. As D. Yang (2006) correctly points out, the famine left a permanent scar on the peasants' psyche. Their belief in the CCP dissipated, if not completely disappeared. The famine did not seriously affect urban residents; it was the Cultural Revolution that shook their confidence in the CCP. Most people wholeheartedly participated in the Cultural Revolution, but it only proved to be a disaster. The so-called revolution reduced the society to a state of man against man. The languishment of the population became clear in the late stage of the Cultural Revolution when both agricultural and industrial growth slowed down and came to a grinding halt. At the dawn of reform, it was clear to the moderates within the CCP that there were two interlinked crises—the economy was on the verge of collapse and the legitimacy of the CCP was hanging by a thread. To them, the way out was to increase output, even if it meant adopting measures that contradicted with the CCP's long-held ideological beliefs. This urgency eventually led the CCP on to the right track of becoming an encompassing organization in the ensuing years.

According to the orthodox Leninist-Stalinist teaching, socialism is superior to capitalism. There was a saying in China that three-fourth of the world's population lives in *shuishen huore*—deep water and hot fires. By the mid-1970s, when China opened a small window to the outside world as a result of the re-engagement of China and the United States, people found that the outside world was a much better place than what they were told to believe, even better than the life they were living. It was also a period when the CCP leadership realized how much time had been lost in China's 20 years of political turmoil and naïve economic leap forwards. This led Hua Guofeng, Mao Zedong's immediate successor, to drive the import of large, complete sets of equipment from advanced capitalist countries. Although this drive ignored the most pressing issue at the time—insufficient grain supply—and was later dubbed *yang yujin* or Foreign Leap Forward, the companies established by using the imported equipment at that time—including the Baosteel and Yangtze Petrochemical—have become part of China's industrial backbone today. There was a change in the conservatives' way of thinking as well. Learning from capitalist countries, at least technology-wise, was no longer considered a sin, but something that had to be promoted. Again, economics outweighed ideology.

We will now discuss the following three historical factors: the Confucian tradition, China's recent history of humiliations, and the class structure made possible by the Communist Revolution.

The Confucian tradition considers *ren* (mercy) and *li* (ritual) as the two most important virtues of a ruler. Both the terms have shades of paternalism in them. *Ren* requires that the ruler treats his or her subjects like he or she would treat his or her own children. *Li* is the behavior code guiding the paternalistic hierarchy. It requires the subjects to show respect to the ruler; however, at the same time, it also requires the ruler to reciprocate the respect of the subjects as *ren*. This second part of the meaning of *li* has been intensively explored by Daniel Bell, a philosopher on Chinese classics (Bell 2006). The traditional interpretation of *li* focuses on its symbolic function to reinforce the ruler's reign and treats it as a way to force the subjects to obey the ruler. Bell believes that a strong reciprocity is built into *li* under paternalism. It is like a good father's reciprocation of his son's "good morning" greeting by handing him his lunch box, which was probably prepared by his mother. The point is not who has prepared the son's lunch box; the point is that the father shows a gesture of reciprocity by some physical action. A good ruler should be like the father—he or she needs to show mercy to the subjects by some visible gestures. Bell believes that these visible gestures, however small, would have an effect on the ruler's real attitude toward his or her subjects.

The Confucian doctrines were strongly reinforced by the meritocracy embodied in China's *keju* exams. In fact, the topics of the exams were exclusively from Confucian classics. Although in reality, there was a culture of corruption among people who received official positions through *keju*, *ren* and *li* were accepted by the bureaucracy as the guiding principles. There were honest officials in every reign who dared to challenge the emperor on the basis of *ren* and *li* although doing so often invited the death sentence. Ray Huang's book *1587: A Year of No Significance* provides a vivid account of how Emperor Wanli was constrained by the often excessive resort to Confucian doctrines by his ministers, especially Hai Rui (Huang 1981). Wanli grew extremely tired of it and did not attend the morning court for more than a decade. Huang believes that the excessive emphasis on Confucian doctrines was one major reason why China lagged behind Western Europe; this was because the doctrines judged everything on a moral basis, which then put off the incentives for commercial development.

While Huang puts forth his argument in a historical context, Bell tends to explore the abstract meanings of *ren* and *li*. Because the context has changed but the culture traits have remained, Bell's exploration is of real value today. Reciprocity between the ruler and the subjects is not unique to China, but pervasive in East Asia where Confucianism has a great impact. In fact, Bell believes that *li* has been better preserved in today's Japan than in today's China. This may explain why East Asian governments are not only more authoritarian than their respective counterparts in other parts of the world but also perform better than the others.

The current Chinese government has a clear flavor of meritocracy. In the last 30 years, the CCP membership has doubled from 35 million to 70 million. Most of the new recruits are students from elite universities or people working in the government or industries with considerable monopoly. In contrast, the CCP's traditional power base, that included workers and peasants, is largely ignored. This led the *New York Times*' correspondent David Brooks to coin the term "meritocratic corpocracy" to describe the Chinese system centered around the CCP. According to him, China is no longer under the dictatorship of proletarians, but under the "dictatorship of talent" (*The New York Times*, December 4, 2007). Although he doubts whether this system would be able to lead China toward a knowledge-based economy, Brooks admits that thus far, the system has brought prosperity to the country as a whole and benefits to ordinary citizens through the meritocratic corpocracy's paternalism.

While the impacts of Confucian doctrines on the CCP may still be debated, the effects of China's recent history of humiliations are real and easy to detect from the CCP's routinely calling the people to unite to build a strong China. "Being backward invites aggressions." Deng Xiaoping used this simple sentence to justify his pragmatism at the end of the 1970s. Starting with the Opium War, China had been under constant aggressions from the world powers until the CCP came to power. The most devastating blow to China was actually not the Opium War, but the First Sino-Japanese War in 1894. Although China had a fleet of superior battle ships, the Japanese navy decisively defeated the Chinese navy. This had a tremendous psychological impact on Chinese intellectuals. Japan had been a pupil of China for 1,000 years and had only started its modernization 30 years ago; yet it easily defeated China. Thus, the one-hundred day reform was implemented to alter the rigidity of the Qing dynasty. The reform failed, but its influence has been preserved. Although the political convictions of the three great leaders of twentieth-century China—Sun Yet-sun, Chiang Kai-shek, and Mao Zedong—might have been different, they all had the same resolve; that is, to build a strong China. Sun wrote *jianguo fanglue*—*A Blueprint for Building the Nation*—immediately after the Qing dynasty was replaced by the Republic. The Three Gorges Dam was actually first envisioned in his blueprint. Chiang was a nationalist; Mao was also a nationalist despite his communist conviction. Indeed, his nationalism was veiled behind his communist conviction.

The Chinese liberal camp is of the view that the Communist Revolution was redundant for China⁴—indeed, they believe that none of the revolutions in the world,

4. To be precise, here, "liberal camp" refers to the right-wing liberals. In the Chinese context, liberals are intellectuals who believe in the market and individual liberty. This is different from what one usually finds in the United States where liberals are people like democrats who are on the left side of the ideological divide and those who are equivalent to the Chinese liberals are people on the right side, represented by the conservative republicans. Although the author prefers distinguishing between the left-wing and right-wing liberals in China, he continues to use the word "liberals" by its currently accepted meaning.

be it the English Revolution, French Revolution, or Russian Revolution, were necessary.⁵ What is overlooked is that the Communist Revolution was a continuation of the *Xinhai* Revolution. The twentieth century was the most critical century for China's future; China underwent a great social revolution in the twentieth century. The *Xinhai* Revolution, the May-fourth movement, and the Communist Revolution were all part of this grand revolution that transformed China from a dictatorial and feudal state to a modern republic. Globally, the Chinese Revolution was part of the even grander transformation from feudalism, dictatorship, and religious oppression to liberal democracy. Before the Enlightenment Movement, human society was in a relatively stable steady state. Dictatorship and religious oppression were largely a way for the human race to deal with uncertainty. Dictatorship—often through dogmatization—eliminated the competition for power; therefore, the risk of social unrest was minimized. On the other hand, interdependency between people was weak; the economy and other social activities were locally confined to a large extent. These factors allowed the existence of dictatorship. On the flipside, the dictator did not have the capability of a modern government to tightly control the local communities. In most cases, the only link between the dictator and his subjects was taxation. This is best illustrated by old China. Despite its protracted existence (more than 2,000 years since Qin Shi Huang unified China) and an extremely stable ruling structure (there were many dynasties with each successive dynasty aping its predecessor), the bureaucracy had never extended below the county level. As long as they paid taxes, ordinary people were left alone by the emperor. In return, the emperor deployed his army against the most serious threat at that time—foreign invasions. The changes started by the Enlightenment Movement were brought about by a deeper dependency between the people of different localities, first in the form of long-distance trade, and later by the integration of the various factor markets, especially labor market, through industrialization. The society structure became complicated and a single ruler was unable to deal with the risks arising from this complex system. There was a need for another way of governance. Democracy provides every citizen a chance to articulate his or her opinion; like the market, it is the most economic way to reveal personal preferences. Democracy did exist in Greek city States however, the high risks of foreign invasion rendered it a short-lived governance system. Modern democratization was started by the English Revolution. However, it was the Enlightenment that helped democracy take root in philosophical and social thought. However, the spread of democracy in practice has been a painful process. Fukuyama is correct in pointing out

5. See Lin Da's travel journals *Bring a Book to Paris* (Lin Da 2004) and *Travelling in Spain* (Lin Da 2007). They believe that the French Revolution was unnecessary because Louis XXI had begun reforms and the Spanish civil war was caused by the uncompromising positions taken by both the Republicans and the Conservatives.

that liberal democracy will be “the end of history”—another steady state for human society; but reaching that steady state will take time.

Twentieth-century China witnessed large-scale violence and bloodshed, but so did other revolutions that matched the scale of the Chinese Revolution. The liberal camp is fond of talking about the Glorious Revolution, regarding it as the best example of compromises between old and new forces. However, it forgets that before the Glorious Revolution, there was half a century of battles, first between the parliamentarians and the royalists, then between Oliver Cromwell’s dictatorship and his old allies, and then between King James II and the parliamentary forces again, some of which were also violent and bloody. King Charles I was decapitated by the parliamentarians led by Cromwell in 1649; then, upon the return of the royalists in 1660, Cromwell’s body was dug out of his tomb (he died in 1653), hung in chains, and beheaded in public. The French Revolution surpassed the English Revolution in cruelty and it took even longer for France to become a stable republic. However, given that people had lived under the dictatorial rule for several thousand years, a revolution extending to half a century or longer was probably worthwhile and maybe even necessary. In order to understand the Chinese Revolution in the twentieth century, we need to look at it from a historical perspective.

To a lesser extent, the accomplishment of the Communist Revolution cannot be underestimated either. Ray Huang has a delicate view about Chiang Kai-shek and Mao Zedong (Huang 2001). He believes that both Chiang and Mao wanted to change China. The difference was that Chiang took a top-down approach and failed, whereas Mao took a bottom-up approach and succeeded. Chiang’s approach failed because the top rung comprised people who would lose out in the transformation; Mao’s approach succeeded because the bottom rung comprised people who had nothing to lose but something to gain in the transformation.

The prevailing view is that the Chinese reform was made possible by the Cultural Revolution. The revolution is purported to have accomplished two things for the reform. First, it destroyed everything, especially authority, so the reform could start from scratch. Second, the results of the revolution were so disastrous that any change could bring better outcomes than the existent state. However, China did not really need the disastrous Cultural Revolution to induce a desire for change. The desire was already present after the Great Famine. Also, China did not need the Cultural Revolution to arrive at an equal society; the Communist Revolution had already done that. China’s social revolution came to an end after the land reform, both in the mainland and in Taiwan.

The creation of a socially equal society enabled the CCP to become disinterested. Before it assumed power, the CCP led the peasants against the landlords and capitalist classes. Following this, 99% of the population became the working class, for whom almost everything was made equal. As a result, the CCP did not need to forge an alliance

with any class. In the first 30 years of its rule, class struggles were emphasized only due to factional fighting within the CCP itself; most of the time, they were political weapons of Mao against his comrades when he felt that his position was insecure, especially after the failure of the Great Leap Forward, which had tarnished his image as a worthy leader. Indeed, the first thing that the reform needed to do was rectify the political fiasco caused by the Cultural Revolution; however, its social foundation was already laid down by the Communist Revolution. An equal society was indeed a favorable condition for the CCP to become encompassing in the reform period; however, credit should not be given to the Cultural Revolution.

3.5 THE ENCOMPASSING STATE AND ECONOMIC GROWTH: THE EAST ASIAN MODEL⁶

The Chinese State is not the only encompassing state. All the governments in East Asia have been encompassing, especially in the early stage of their economic development. Before we discuss how the encompassing state helped China's economic transition, it is worthwhile to discuss how it has helped the East Asian economies to catch up with the capitalist societies. This will help us in gaining a better understanding of the nature of the encompassing state.

The role of the government in East Asian economic development has been extensively discussed. For the liberal camp, the role of the government in the East Asian miracle was irrelevant, if not negative. All that was needed was the functioning of the free market, especially when it concerned exports. For others, the government in East Asia played an active and positive role in fostering their economic development. From this view came the notion of "the developmental state" (World Bank 1993). Some people even went further to suggest that the East Asian governments were also engaged in interventional activities that defied the orthodox doctrines of standard economics by deliberately "getting the price wrong" (Amsden 1989). A third view tries to take the middle ground between the above two views by proposing the market-enhancing thesis. As Aoki, Murdock, and Okuno-Fujiwara (1998) tried to argue, governments in the East Asian economies played an active role in their economic development; however, their intention was not to replace the market in resource allocation, but rather to enhance the market's functions. This debate is likely to continue. It would not be appropriate to judge the merits and shortcomings of the above three views in this book; rather, we would like to approach the issue from the perspective of the encompassing state.

6. This section draws on Yao (2004c).

The above three views revolve around the relationship between the government and the market—whether the two are substitutes or complementary to each other. The perspective of the encompassing state moves us beyond this market-state delineation, and enters into the discussion of the political economy of the state.

In the case of many developing countries, the failure to catch up is not because of the lack of market, but rather due to the lack of good governance. Myrdal's classical study of South East Asia can attest this observation (Myrdal 1972). Good governance may have many forms, each of which can be suitable for a specific context. Democracy can be a good form of governance in a country with homogenous residents and stable economic and social environments; however, it may not be as effective in a developing country where the population is divided both economically and socially. Democracy is a passive aggregating device. Under normal conditions,⁷ it can prevent disastrous events, but it cannot provide the impetus that is necessary for the catch-up process. As the classical works of Mancur Olson have convincingly shown, democracy tends to foster interest groups that care more about distribution rather than economic growth, and for that matter, democracy tends to react slowly toward the changes in the economic environment (Olson 1982). For the catch-up process to occur, a more active state is needed.

Yet, we do not want to have a Leviathan. We want to have an active state with a considerable amount of limits placed on it. Such a state can be authoritative, but is nowhere close to a dictatorship. The encompassing state is such a state. It exists in East Asian societies where it has the following distinctive features.

It is a utilitarian that stands unmoved against interest group pressures. In many cases, it implies sacrificing the interests of some groups in exchange for the advancement of the whole country. As such, persuasion and coercion may occur. However, in order to avoid social unrest, the encompassing state also possesses another feature of maintaining a fairly equal income distribution by deliberately designed industrial and employment policies.

These features distinguish the encompassing state from other types of authoritative states. It differs from dictatorship in that the dictator only cares about his own and his cronies' interests but ignores the interests of the country; it differs from the populist state in that it does not bend to the populist pressure to redistribute; and it differs from the Soviet-style socialism in that it is open to all kinds of ownership and admits that the market is the fundamental tool for resource allocation.

The catch-up process needs the concentration of resources—a task that cannot be fulfilled by the market alone in the presence of scale economies and the coordination problem. In East Asia, this task has been undertaken by the government. However,

7. Let us not forget that Hitler was appointed as the German chancellor through a democratic process.

this government has to be effective and should have a clearly defined goal. The encompassing State in East Asia provides exactly such a government. In order to achieve the goal of catching up, East Asian governments have adopted various measures—ranging from engaging in market-enhancing coordination to establishing a socialist planned system—to accelerate capital accumulation and technological progress. For the encompassing state, the goal is more important than the means, so the three views about the government—the liberal view, the “getting-prices-wrong” view, and the market enhancing view—are meaningless. The encompassing state is pragmatic.

There will come a time when the catch-up strategy would have to be discarded. In the case of East Asian governments, the challenge is to resist the pressures of vested interest groups to maintain the status quo. The concentration of resources means that some sectors and even some firms are favored and some are not. Those that are favored would strongly oppose the change because they would lose their privileges once the change occurred. The encompassing state stands unmoved in the face of such pressures. One example is that of the Korean government, which under the leadership of President Kim Dae-jung pushed forward the economic transition after the Asian Financial Crisis hit Korea with severe consequences. Another example is that of the Chinese government, which under the leadership of Premier Zhu Rongji initiated a major structural adjustment and privatization program for the Chinese industry in the mid-1990s. A large number of SOEs closed down and millions of workers lost their jobs. Although the adverse impacts can still be felt today, the structural adjustment has greatly strengthened China’s competitiveness and the privatization program has increased the efficiency of firms.

Curiously enough, populist pressures could win their way in some authoritarian regimes. The most telling example is that of Argentina under the rule of Peron. Although he has been regarded as a dictator, Peron adopted strong populist policies during his two terms of presidency. The working class was systematically favored and redistribution was undertaken on a large scale. The result was that Argentina slipped from its place among the high-income countries in the early twentieth century to barely a middle-income country. One would assume that the Argentinean leaders would learn from this experience; however, the populist legacy has lingered on. The culmination was the 2002 financial crisis. The dollarization of the Argentinean economy was designed to bind the monetary authority’s hand so as not to engage in inflationary expansion. The initial outcome was very encouraging, and hyper-inflation was curbed. However, the government did not curb handing out social welfare. Under populist pressure, the government had to keep up its welfare spending. This, coupled with Argentina’s poor trade records, shook the confidence of ordinary Argentineans. Thus, what followed were the bank run and finally, the collapse of the Argentine peso. The East Asian governments have done a much better job

than Peron and the recent Argentinean government. Instead of engaging in large-scale redistribution, the East Asian governments have encouraged the dissemination of benefits created by the leading sectors. In Korea, industries were concentrated in Seoul and Pusan in the initial stage of development; however, large-scale migration was encouraged and this enabled residents in rural areas to gain the benefits of economic growth. In Taiwan and mainland China, labor-intensive industries quickly moved to the countryside under localized rural industrialization. In the early stage of Japan's economic development, labor-intensive industries were also encouraged. All these measures enhanced productivity and improved income distribution at the same time. As a result, the growth of the economic pie was accompanied by a fair distribution among the population.

The encompassing State in East Asia is endowed with power that is beyond the scope of a democratic government. While it is necessary to catch up economically, the concentration of power has detrimental effects and even disastrous consequences in the political arena. It is rather easy for the ruling group to use the power to pursue its own interests; therefore, corruption and political suppression were common. East Asia had lived with the dilemma through its earlier development stage; with catching up as its paramount goal, it had opted for favoring economic development rather than political freedom. However, a change in the economic model calls for a change in the political arena. With catching up approaching its end, the concentration of power has lost its causes, and decentralized economic decisions call for economic democracy. The most significant consequence that this trend brings about for the political arena is the diversification of the political basis and the creation of a large middle class, which make political democracy inevitable. Korea and Taiwan have followed this process, but Singapore has lagged behind.

3.6 THE ENCOMPASSING STATE AND ECONOMIC REFORM

In order to understand why the encompassing state has been a necessary condition for the success of China's gradual reform, we have to first understand why intentional human actions are needed for institutional change. This leads us to start with Friedrich von Hayek's notion of spontaneous order.

Hayek became famous for his attacks on the weaknesses of socialism. It turned out that his criticisms were correct although he lost in the socialist debate of the 1930s. The Soviet Union behaved almost exactly as he had predicted. There were constant political repressions and in the end, the economy (together with the bureaucracy) became so rigid that by the end of the 1970s, the Soviet economy (like the Chinese economy) was on the verge of collapse. However, Hayek had gone too far in his philosophical thinking

by denying that the purposeful actions of human beings played a role in creating social order. According to him, spontaneous order—the order created by the unintentional actions of individuals to advance their own interests—is the only order that has a moral ground to exist in the world and value, to be studied by scholars. Everyone is blindly pursuing his or her personal interests without any concern about whether or not these actions would change the world; if they really did, he or she would happily accept the change because that is the best outcome for the world. What a wonderful world! If the only purpose of Hayek's spontaneous order was to warn the world not to try the grand social engineering conducted by Stalinist socialism, like Scott (Scott 1998) recently argued for, many people outside the libertarian camp would happily accept it. However, Hayek wanted more; he wanted people to believe that spontaneous order is the only kind of order that we human beings should pursue.

However, if our only purpose is to pursue spontaneous order, what is the role of human beings? Don't other animal species also behave selfishly, like Hayek posits that we do? Yes, there exist rules within an animal colony, and some of them are quite sophisticated. However, the author believes that Hayek's intent was not to reduce human society to the level of an animal colony. He was a moral person and pushed his theory to the extreme only because he was trapped in his mindset against the Stalinist socialism.

It is relatively easy to explain why economists are fond of the idea of spontaneous order. Theoretical economic research is built around of the concept of equilibrium. Equilibrium implies a state in which people do not have any incentives to deviate from what they do at that point. That is, equilibrium behavior is self-enforcing. This is exactly a spontaneous order—people act from their interests only; but in the end, they behave predictably. However, the believers of spontaneous order are confused between theory and reality. Equilibrium is a powerful analytical tool for economists to describe the real world; but its role ends there. Economics might be a science but not because economists can use mathematical models to describe the world. There is a fundamental difference between economics and mathematics. For a mathematician, self-contained logic is the only criterion for sound scholarship. An economist can match a mathematician in that respect, but that does not qualify his work as good scholarship. His work has to be tested against the real world. Since the real world is much more complicated than mathematical logic, it is almost impossible for an economic theory to exactly match the happenings in the real world. To a large extent, economic theory is story telling. In this regard, economics is the same as history in essence (Yao 2006).

In reality, institutions, which are a kind of order, are created by intentional human actions. We may find that human history shows strong traits of spontaneous order if we use a large time scale, for example, 100 years as a unit of time, to measure history.

However, that does not render intentional human actions irrelevant for those long-term historical patterns. They are the cumulative results of short-term human actions. Take morality—our longest enduring institution whose roots we have not fully understood—as an example. Adam Smith defines morality as the imperatives articulated by “the resident in our heart” (Smith 2002); that is, something that we would like to do out of our own will. But, that is only the ideal case. In reality, morality needs a social structure to enforce it. It is easy to find that people behave in a less moral manner in a strange community than in their own community. It is also easy to find that people behave in a less moral manner when they interact with strangers than with someone familiar. In the first case, morality is better enforced by a more close-knit community where there is a ready social structure—be it kinship in a third-world village or gossip in a modern community—so that the enforcement can be carried out with relative ease. In the second case, morality has a limit of applicability.

When commenting on Hayek’s concept of unintended consequences, Amartya Sen writes cynically:

Indeed, it is hard to think that there can be much profundity in the general conclusion that many consequences are entirely unintended. Despite my admiration for Friedrich Hayek and his ideas... I have to say that this modest recognition can scarcely be seen as a momentous thought. If it is, as Hayek puts it, a “profound insight,” then there is something wrong with profundity. (Sen 1999, 257)

In reality, the notion of spontaneous order cannot find support; further, it hampers genuine academic research. It is like the statement “anything goes.” If we claim that the American Constitution was a great piece reflecting the great ideas of the American founding fathers, the Hayekian will tell us that the Constitution only reflected what was happening during America’s independence; he or she will also show us evidence that the Constitution was actually a compromise between different groups of people. In the same vein, the Hayekian will also inform us that after the Glorious Revolution, England had a spontaneous order out of the fighting between self-interested parliamentarians and the same self-interested king. Or the Hayekian will simply give us the example of all cars driving on the right as a piece of evidence for spontaneous order. Is the Hayekian wrong? No, he actually does tell us some truth. But, how significant is that truth? A survey was administered to famous scientists at the very beginning of the twentieth century asking them what had been the most important innovation in the last millennium. One scientist answered: “Hay.” His reason? Without hay, we could not have raised horses; and without horses, civilization could not have conquered the middle and northern parts of Europe. This reasoning was not wrong, but it was trivial. Spontaneous order is also a trivial explanation to the rich contexts that we have found in human institutions.

Institutional change is always orchestrated by political entrepreneurs. Take the example of a modern democracy. It seems that collective decisions can be made through the voting of atomistic citizens. However, if that were the case, we would not need the parliament, not to mention the tedious debates that take place there. But the parliament is exactly the stage for political entrepreneurs' performance and the debates are used by them to win support from their peers and citizens. There is an old Chinese saying *luanshi chu yingxiong* that means chaos produces heroes. Historical heroes became heroes not because they destroyed things, but because they built things; otherwise, they would not have been remembered today. As the saying goes, *shengzhe wanghou baizhe zei* or winners become kings and lords, and losers become bandits.

The CCP's pursuit of encompassing interests has helped China's economic reform mainly by choosing the reform path that is best for China's overall and long-run welfare. This is not to deny the role played by other factors, particularly regional competition. However, competition has its limitations with regard to initiating the right reforms. As highlighted in the introduction of this chapter, reforms are not without costs for local governments and their budget constraint may hinder them from adopting a reform measure. In addition, regional competition may not always produce positive results for China as a whole. Regional protection in the labor market is a case in point. The large wave of rural-urban migration had a real impact on the urban labor market in the 1990s when economic adjustment programs led to the unemployment of a large number of SOE workers. Privatized SOEs as well as original private firms often opted for hiring migrant workers instead of local unemployed workers in order to cut costs. Therefore, there was strong resistance to rural migrants in the city. Local governments around the country issued numerous regulations ranging from an outright ban of rural migrants, as in Nanjing, which had a disastrous effect on the city, to milder restrictions on the type of jobs that rural migrants could take up as the Beijing municipal government did. It was the Hu Jintao-Wen Jiabao government that, through a series of central government initiatives, including Wen's personal involvement, began to change the situation. Most of the discriminatory policies, including the notorious *Regulations on Sheltering and Returning Unemployed Persons* (*wuye renyuan shourong qianfan tiaoli*) have been outlawed or revised.

One also needs to note that except in a few cases, such as the rural reform, most Chinese reforms were not strictly Pareto improving. That is, some segments of the population would lose in reforms while others would gain. Competition might lead to a reform, but the discontented segments would align to oppose it. It is then up to the central government to decide whether or not to implement reform, and if yes, how to arrange for compensation to the losers. The induced institutional literature, initiated by Davis and North (1971) and North and Thomas (1973) and formalized by Ruttan and Hayami (1984), maintains the efficiency hypothesis regarding institutional change:

If a new institution increases the overall gains of the society, then it will be adopted. This hypothesis is an analogy of a firm's profit maximizing behavior when it decides whether or not to introduce a new technology—the technology will be introduced if its benefits outweigh its adoption costs. Hayami himself later calls this hypothesis naïve because it fails to take into consideration the political process involved in institutional change (Hayami 1997). North also notes that the high transaction costs will halt efficient institutional changes (North 1981; 1990). Yao (2004c) formally shows that the efficiency hypothesis does not hold if the political process is considered. In the meantime, we will also show that a properly designed transfer scheme can enable every efficient institutional change. Indeed, designing and implementing such a scheme requires authority; in China's case, this authority has been the central government. This was clearly illustrated by the role of the central government in SOE privatization. As the discussion in Chapter 8 will reveal, the central government did two things to provide critical support to this reform. One was to provide tacit endorsement to privatization, and the other was to provide strong assistance to unemployed workers to find new jobs.

It is noteworthy that not all the reforms adopted the bottom-up approach. In areas like international trade and finance, the central government had to take the initiative. In such areas, the judgment of the central government becomes critical. As we will see in Chapters 10 and 11, the central government has maintained an impressive record in finding the right sequence of reforms. It has been particularly careful in reforming the financial market, capital control, and the exchange rate regime. Because things are highly volatile in those areas, a prudent approach is better than rash changes.

3.7 CONCLUDING REMARKS

In closing, it is necessary to warn the reader that neither the encompassing state needs to be authoritarian nor does an authoritarian state automatically qualify as an encompassing state. A government in a democracy can be encompassing if its decision-making mechanism enables it to avoid its policies from being hijacked by special interests, or if the organizations in the country are themselves encompassing relative to the society. The difference in the salaries of the top executives and ordinary workers is about five to six times in the Nordic countries, whereas it could reach a hundred times in the United States. Despite constant warnings, mostly from the British and American media, that the Nordic model would not survive, the economies of the Nordic countries have kept pace with and in some areas, such as the hi-tech industry, have led the rest of the developed world. On the other hand, there are many authoritarian regimes whose bases of interests are narrow or superficially encompassing at best. Some of them form allies with the business elites; some, represent specific ethnicities; and some, put a populist

face on their agendas, only making them superficially encompassing. Whether or not a government becomes encompassing depends on the class structure, ethnicities, and historical and cultural contexts.

It is also worth pointing out that an encompassing state may not remain encompassing over time and non-encompassing states could become encompassing. The first point is especially pertinent in the case of China. The core of the encompassing State in China is the growth consensus that puts paramount emphasis on economic growth. When the chances of growth are many, this consensus helps China's rapid growth. However, the energy unleashed by the reform is diminishing and China will become a normal developing country sooner or later. Growth will become more difficult. There is a danger then that the consensus will turn on its head by encouraging rent seeking instead of growth. This is so because many rent-seeking activities can easily disguise themselves as being pro-growth. For example, special industrial interest groups can argue relatively easily for favorable policies on the basis that those policies can lead to faster growth of the industries that they represent. We will return to the issues involved in the continuation of the growth consensus in the concluding chapter.

APPENDIX

CONDITIONS FOR DISINTERESTED GOVERNMENTS

Here, we show that equality helps a disinterested government to emerge in a society. Our approach shares the spirit of Acemoglu and Robinson (2006), which is to find an economic explanation for the behavior of political entities. We treat a government as a coherent organization and ignore the dynamics within it. In the rest of this section, we will develop a simple model to show that under certain conditions, a government can become disinterested in the society and adopt growth-friendly policies. The model relies on highly simplified assumptions, but is flexible enough for us to convey the main ideas of our theory.

To begin with, consider a society comprising two segments of population, Group A and Group B. Both groups are well organized so they behave like well-functioning organizations. Both are equally productive, capable of producing Y_H of output when no taxes are imposed on them. However, they differ in their political powers. Here, power can be linked to a group's organizational ability or historical events (e.g., an incumbent group that previously controlled the government would be more powerful than other groups). Without loss of generality,

let us assume that Group A is more powerful than Group B. There are two types of government. One type of government is detached from both the groups; we call this government the “outsider government.” The other type is formed from one of the two groups, and we will call it the “insider government.” Both types of governments have the freedom to choose three levels of taxes: 0, g_M , and g_L , where $0 < g_M < g_L$. However, taxation reduces the incentives of both the groups to produce output. Corresponding to the three levels of tax, their output levels are Y_H , Y_M , and Y_L . Naturally, we have $Y_H > Y_M > Y_L$. We impose a condition $Y_M > 0.5(Y_H + Y_L)$; that is, the medium level of output is larger than the average of the high and low levels of output.

The government uses the collected tax for two purposes. One is for the provision of public goods, and the other is for its own consumption. The second is a reward for its services of the first. The tax rate g_M can be viewed as a “fair” rate for the exchange between the two groups of people and the government. Therefore, we call the government a disinterested government if it levies g_M on both the groups of people. The society as a whole produces a total of $2Y_M$ of output.

However, both the groups may, acting separately or jointly, revolt when the tax rate becomes g_L . The probability of a successful revolt is μ_A for Group A and μ_B for Group B when they act separately, and is $\mu_A + \mu_B$ when they act jointly. These probabilities depend on two factors—the political power of the revolt group and the government’s techniques in suppressing the revolt. We will provide further exposition when we discuss the details of the model. The payoff to the government, therefore, is the amount of taxes it can collect from the two groups weighed by the probability of its staying in power. Next, we study the outsider government first.

The Outsider Government

An outsider government is one that favors either group of people. It obtains income solely from taxing the two groups. Obviously, not taxing is not an option for it. Its choice is between g_M and g_L . However, the government can exercise selective taxation. For example, it can form an alliance with the more powerful group—Group A—and tax the less powerful group—Group B. When it does form an alliance with Group A, the government has to share the tax with Group A. Let β denote its share. There are therefore three options for an outsider government: (1) taxing both the groups by g_m , (2) forming an alliance with Group A and taxing

(continued)

APPENDIX (*continued*)

Group B by g_L (it does not make sense for the government to still tax g_M), and (3) taxing both the groups by g_L .

In Case (1), both groups have no incentive to revolt so the government's payoff is

$$W_{o1} = 2g_M Y_M. \quad (3.1)$$

The social output is $2Y_M$. In Case (2), Group B will revolt and have a probability of μ_B to succeed. If the revolt succeeds, the government is ousted and its payoff is zero. A new outsider government is installed and the tax rate is restored to g_M . The incumbent government's expected payoff is

$$W_{o2} = \beta g_L Y_L (1 - \mu_B). \quad (3.2)$$

The total output of the society is $g_H + g_L$, which is smaller than the amount achieved in Case (1). In Case (3), both the groups of people will revolt and the probability for them to succeed is $\mu_A + \mu_B$. So, the expected payoff of the government is

$$W_{o3} = g_L Y_L (1 - \mu_A - \mu_B). \quad (3.3)$$

The total output of the society is $2g_L$, the lowest among the three cases. That is, the government's being disinterested yields the highest output for the society as a whole.

However, to make the government a disinterested government, we need

$$W_{o1} \geq W_{o2}, \text{ and } W_{o1} \geq W_{o3}. \quad (3.4)$$

Apparently, $g_L Y_L$ has to be greater than $g_M Y_M$ to make the comparison interesting because otherwise, the two inequalities in (4) hold automatically. A sufficient condition to make both inequalities hold is

$$g_M \geq \text{Max} \left\{ \frac{\beta(1 - \mu_B)}{2}, 1 - \mu_A - \mu_B \right\} \frac{Y_L}{Y_M} g_L. \quad (3.5)$$

It is easy to find that the first value is taken if $\mu_A > \left(1 - \frac{\beta}{2}\right)(1 - \mu_B)$, and the second value is taken if the reverse is true.

The Insider Government

Since Group B is politically weaker than Group A, the conditions that guarantee Group A's being a disinterested government will also cause Group B to be a disinterested government. Therefore, in this case, we only consider the case wherein the insider government comes from Group A. When it is in power, Group A has two options. One is to be a disinterested government that taxes both the groups with the rate g_m ; the other is to tax only Group B only and not tax itself. The first option gives it a payoff of W_{o1} . In the second option, the insider government has a probability of $1 - \mu_B$ to stay in power and gets a payment of $g_L Y_L + Y_H$. With probability μ_B , it will be toppled by Group B in which case Group B becomes the government and taxes Group A by g_L , so Group A's payoff becomes $(1 - g_L)Y_L$. Thus, its expected payoff is

$$W_1 = (g_L Y_L + Y_H)(1 - \mu_B) + (1 - g_L)Y_L \mu_B. \quad (3.6)$$

The total output of the society is $Y_L + Y_H$, less than the amount achieved when the government behaves in a disinterested manner.

However, to make option 1 more attractive than option 2 to the insider government, we need to have $W_{o1} \geq W_p$, which is equivalent to

$$g_M \geq \frac{1}{2}(1 - 2\mu_B) \frac{Y_L}{Y_M} g_L + \frac{1}{2} \left[\frac{Y_H}{Y_M} - \left(\frac{Y_H}{Y_M} - \frac{Y_L}{Y_M} \right) \mu_B \right]. \quad (3.7)$$

In the case of the given tax rates and output levels, whether or not the above inequality holds depends critically on the magnitude of μ_B , the probability of a successful revolt by Group B. The higher this probability, the more the insider government will become disinterested than predatory. This is an intuitive result as a higher probability for Group B's revolt to succeed imposes a higher expected cost on the insider government.

(continued)

APPENDIX (continued)

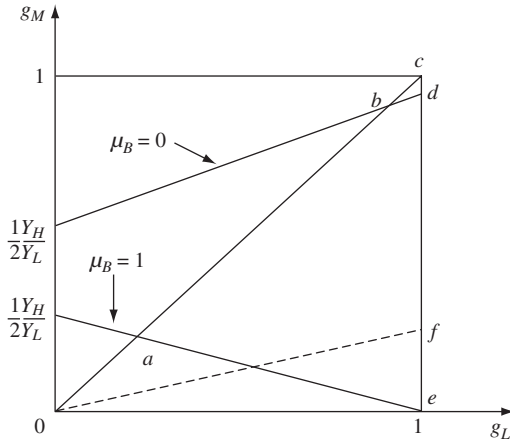


FIGURE 3.1 Permissible parameter space for the insider government

Conditions for Disinterested Governments

We reverse the order by starting with the insider government. Figure 1 helps us to identify the conditions for the insider government to be disinterested. The boundary condition for the inequality in (7),

$$g_M = \frac{1}{2}(1 - 2\mu_B) \frac{Y_L}{Y_M} g_L + \frac{1}{2} \left[\frac{Y_H}{Y_M} - \left(\frac{Y_H}{Y_M} - \frac{Y_L}{Y_M} \right) \mu_B \right], \quad (3.8)$$

defines a line in the (g_L, g_M) space whose intercept is $\frac{1}{2} \left[\frac{Y_H}{Y_M} - \left(\frac{Y_H}{Y_M} - \frac{Y_L}{Y_M} \right) \mu_B \right]$, and slope is $\frac{1}{2}(1 - 2\mu_B) \frac{Y_L}{Y_M}$. Both decrease monotonically in μ_B . Note that the slope can be negative while the intercept is always positive. Since g_L has to be larger than g_M to make the comparison interesting, the permissible parameter space for g_L and g_M to ensure a disinterested government is the triangle defined by the boundary condition (8), the 45° line, and $g_L = 1$. In Figure 1, we use bcd to denote the permissible space.

When μ_B is equal to 0, the height of d is $\frac{1}{2} \left(\frac{Y_H}{Y_L} + \frac{Y_L}{Y_M} \right)$, which may be greater than 1,

in which case the bcd triangle vanishes. When μ_B is equal to 1, the slope becomes negative and the permissible space becomes the triangle ace , where e is the point $(1, 0)$. When μ_B is between 0 and 1, the permissible space is between those two triangles. It is evident that the size of the permissible space increases monotonically as μ_B increases.

The size of μ_B depends on two factors. One is the relative political power between Groups A and B. When Group A is politically stronger than Group B, μ_B becomes smaller. The other factor is the government's suppression techniques including military power. When the government is better equipped with those techniques, μ_B also becomes smaller. Conversely, when the two groups have more equal political power or the government has less sophisticated suppression techniques, μ_B tends to be larger. Therefore, we have the following proposition:

Proposition 1. The insider government is more likely to become a disinterested government when the society is more equal or the government has weaker suppression techniques.

For the outsider government, it turns out that it is a disinterested government as long as the insider government is disinterested too. To show this, note that the boundary condition for inequality (5) is a ray from the origin in the positive orthant

of the (g_L, g_M) space with its slope being either $\frac{\beta(1 - \mu_B)}{2} \frac{Y_L}{Y_M}$ or $(1 - \mu_A - \mu_B) \frac{Y_L}{Y_M}$.

In Figure 1, it defines the permissible space for g_L and g_M as the triangle ocf . Our task is to show that ocf always contains bcd for any parameter values. This amounts to showing that the height of f is always no larger than the height of d .

Note that the height of d is $\frac{1}{2} \left(\frac{Y_H}{Y_M} + \frac{Y_L}{Y_M} \right) - \frac{1}{2} \left(\frac{Y_H}{Y_M} + \frac{Y_L}{Y_M} \right) \mu_B$, and the height of f is either $\frac{\beta(1 - \mu_B)}{2} \frac{Y_L}{Y_M}$ or $(1 - \mu_A - \mu_B) \frac{Y_L}{Y_M}$. It is then easy to show that the two latter heights are smaller than the first height for any values of μ_A, μ_B , and the levels of output. For example, when μ_B is equal to zero, the height of f is $\frac{\beta}{2} \frac{Y_L}{Y_M}$, which is

(continued)

APPENDIX (*continued*)

guaranteed to be smaller than one; when μ_B is equal to one, the permissible space is *oce*, which contains *ace*.

In addition, the permissible space for a disinterested outsider government increases with larger μ_A and μ_B because the height of *f* decreases. Therefore, we have the second proposition:

Proposition 2. The outsider government is more likely to be a disinterested government when the probability of revolt is high. Under the same conditions, it is a disinterested government whenever the insider government is one.

CHAPTER
4

Institutional Change as Ideological Discontinuity

Decentralization and encompassing state provided the institutional foundation for China's economic reform. However, there remains one more factor, which we will describe here, that helped the Chinese reform converge to the market economy—the evolution of ideology. After stepping out of a long period of the planned economy and communist ideologies, a change in ideology was necessary for China to gradually complete its reform. When China began its reform process, there were many who adhered to the ideology of the planned economy. Some of these people genuinely believed that a planned economy was the key to a socialist China while others were preoccupied with the retention of power and self interests, which were linked with the institutions of the planned economy. Both types of people tended to oppose reforms, and their numbers and power could have created serious obstacles to reforms, especially when the reforms had just begun. As a result, a change in ideology was critical for gradual reform to persist. Central to this chapter's argument is that institutional change is a result of ideological discontinuity. Viewing institutional change in this manner is quite different from the conventional view held in mainstream economics. The rationality assumption and equilibrium analysis confine the economic explanations of institutional change to a narrow group of institutional changes that fit into the mechanical routines prevailing in mainstream economics. In most cases, institutional changes are attributed to changes in exogenous parameters, leaving institution itself in a black box. Studying the role of ideology is one way to unlock this black box. This line of research is more consistent with the views expressed by other social sciences, notably, psychology and political science, and has long been advocated by Douglass North (North 1990; 2005).

Viewing institutional change as ideological discontinuity requires a theory of how ideology evolves. Here, we distinguish between two levels of ideology. One is its core

consisting of the abstract notions of relations within the human society and between humans and nature; the other is its operational part consisting of the operational rules that its holders believe are vital to reach the goals set by its core. The second level directly defines institutions. Ideological discontinuity can occur at both levels, but the operational rules are more fluid than the core. When ideology changes to make sense of what has happened in reality, we say that the holders of the ideology are pragmatic. However, pragmatism is not sufficient to explain the endogenous institutional change. The correct meaning of endogenous should be intentional; that is, the concerned agents wish to change the existing institutions of their own will. Therefore, we will begin with a discussion of human intentionality.

4.1 INTENTIONALITY AND INSTITUTIONAL CHOICES

In the previous chapter, we rejected Hayek's notion of spontaneous order and established the argument that institutional change is always brought about by some institutional entrepreneurs. In this section, we will continue to further show that intentionality is critical for most manmade institutions.

Let us begin with the classic Prisoners' Dilemma game shown in Figure 4.1. Suppose that A and B are two members of a crime organization. A is the group leader and B is an ordinary member. They are caught by the police and placed in separate custody. The police do not have sufficient evidence to prosecute them and require them to confess. A and B have two choices. One is to follow their organization's rule to not confess, in which case, we say they adopt the strategy of "cooperate"; the other is to confess, in which case, we say they adopt the strategy of "defect." In order to destroy their collusion, the police offer them the choice of becoming "dirty witnesses." The following are their possible sentences. If both A and B deny their crimes; that is, if they cooperate with each other, A will be sentenced to two years in prison and B will be sentenced to one year in prison, both charged for a lesser crime. In Figure 4.1, their payoffs are shown as -2 and -1 , respectively. A is slated for a more severe sentence because he is the group leader. If A confesses but B denies the crime; that is, if A defects and B still cooperates, then A walks out a free man and B gets a sentence of five years in prison. In Figure 4.1, A's payoff is shown as 0 and B's, as -5 . If A cooperates and B defects, then B walks out

		B	
		Cooperate	Defect
A	Cooperate	$(-2, -1)$	$(-7, 0)$
	Defect	$(0, -5)$	$(-3, -2)$

FIGURE 4.1 Prisoners' Dilemma game

free and A gets a sentence of seven years. If both confess, then A is sentenced to three years in prison and B is sentenced to two years in prison.

It is easy to see that “defection” is the dominant strategy for both A and B. In the game theory jargon, (defect, defect) is the dominant strategy equilibrium; that is, an equilibrium in which both A and B find defection to be the best strategy regardless of the other person’s choice. For example, if B cooperates, it is better for A to defect because cooperation would send him to prison for two years, but defection will set him free; if B defects, it is also better for A to defect because cooperation would give him a sentence of seven years in prison, but defection will only send him to prison for three years. One can apply the same reasoning for B. Thus, the equilibrium outcome is that A is sentenced to three years in prison and B is sentenced to two years.

However, it is clear that (cooperate, cooperate) provides the best joint outcome for A and B because the total number of years in prison is the smallest in this case. If A and B have a long time horizon and plan to work together again after they leave the prison, they should cooperate so that they are able to minimize their imprisonment time. In economists’ jargon, (cooperate, cooperate) generates a potential Pareto-improving outcome relative to the other three outcomes. Here, “potential” means that some transfer scheme exists so that both A and B can be better off than with any other outcome. For example, as compared with (defect, cooperate)—the first is the action of A, and the second is that of B—there is a net saving of two years prison time for A and B together. However, the saving is not symmetric. A’s sentence increases by two years, whereas B’s drops by four years. Using the four years saved, B can generate more income from his criminal activities. He can give A two and half years’ worth of money to more than compensate A’s two years in prison—assuming A and B have the same level of productivity; thus, A prefers cooperation to defection. The remaining one and half years’ worth of money can also more than compensate B’s one year in prison, so B also prefers cooperation to defection. The total net gain of A and B is two years’ worth of money.

Thus, the dilemma is that A and B cannot obtain the best joint outcome because their actions are directed by their own rationality, or more bluntly, their selfishness. Human society constantly faces this kind of dilemma. Fishermen know perfectly well that they would collectively enjoy a large stock of fish if all of them refrained from fishing during the fish breeding season; however, they do not heed this, and fish in all seasons. Both drivers and pedestrians know that traffic at a road intersection would become smoother if they followed the traffic lights, but drivers and pedestrians want to rush through anyway. Parents know that their children’s chances of getting into a university would be the same even if they did not push their children to study hard; but in reality, parents drive their children to study harder. All of us know that following the moral code of conduct dictated by our culture would be for the betterment of society; however, in reality, we

find ourselves crossing the line occasionally. In addition, we hear of crimes committed on a daily basis anyway.

This is why we need institutions. Often, institutions are not equilibria, but imposed rules that serve to advance the best outcomes for the society as a whole. The all human built-up has been trying to deal with the Prisoners' Dilemma. Since the best outcomes cannot be sustained in equilibrium; that is, by the agents' volitions, we require institutions to impose a set of rules to ensure that they happen. In the game shown in Figure 4.1, the rule could be that one gets four years imprisonment—the maximum gain of defection—if one defects. Indeed, crime organizations often have rules of punishment regarding defection and some of them are rather intriguing. In the film *Luo ye gui gen* (*A Falling Leaf Returns to its Root*), the bus hijacker (played by Guo Degang) shows Lao Zhao (played by Zhao Benshan) the tattoo on his back that says “infidelity”—the punishment he once received from his boss after he confessed to the police when he was a young man. Society, in general, creates laws to enforce moral codes, order, and other objectives for public good. These laws are not equilibrium outcomes; otherwise, the crime rate would have been zero.

This does not mean that equilibrium as an analytical tool is incorrect or useless in economics. It is just the opposite. The concept of equilibrium is perhaps the most important notion that distinguishes economists from other social scientists. It provides a benchmark for further analysis. For example, in the game presented in Figure 4.1, the equilibrium is defection by both A and B. That is, this would be the outcome in the absence of an institution. The purpose of institutions is to rule out this inferior equilibrium outcome. Indeed, institutions would not be required if the equilibrium outcome was already the social best. Unfortunately, this kind of equilibria does not occur frequently in reality. The Prisoners' Dilemma type of equilibria prevails.

Despite this, in very rare cases has human society failed to design proper institutions when the equilibrium outcome is not socially optimal. There are always some people who care more for the greater good than their own immediate interests. This is where intentionality comes in. Intentionality has several meanings here. The first is that an institution serves a specific purpose. In the modern age, these purposes are mostly directed toward the society. In primitive societies, they could have been at the psychological level, primarily because people had limited knowledge about nature. In any event, these purposes are not the unintended consequences of atomistic rational individual choices, but the intentionality of a few individuals. Why has it not rained much this year? In a society with limited metrological knowledge, someone, perhaps a high priest, would concoct a story that there is a god in the heavens who controls rains and this year, he is unhappy and so has not allowed the sky to rain down on the earth. This would seem like a reasonable story for the people and the ruler who would then decide to hold a

ceremony to appease the god. By mere coincidence, the ceremony might be effective half the time, thereby reinforcing people's belief in God, and the ceremony becomes a national event. The Altars of Heaven and Earth in Beijing served exactly this purpose in old China. In a modern society, institutions, often taking the form of laws, usually serve multiple purposes because they are the results of compromises among many stakeholders. However, intentionality is more pronounced now than in the past, partly because of the spread of information and partly because the modern state is increasingly involved in the society. The latter, of course, is closely linked with the spread of intentionality among the citizens; that is, they have become more interlinked because of the increasingly complex nature of modern society and thus have to get more involved in public decisions. This leads us to the second meaning of intentionality, which is that agents involved in institutional building are conscious of how the new institution will affect their life and perhaps others' lives. Special interest groups know perfectly well what they desire when they hire lobbyists in Washington to lobby the congressmen and senators at Capitol Hill. The result, of course, is a compromise between different interest groups, but the key is that it reflects the will of the interest groups. Finally, intentionality could also mean that institutional change cannot be explained if intentional human actions are excluded from the theory. By using the efficiency hypothesis as an example again, we can see why this is the case. This hypothesis says that institutions will change to explore economic gains. But the question is: Who will initiate the change? The free-rider problem must certainly exist unless people can recoup all their efforts if they bring about the change. Early institutional writings lean toward the belief that the efficiency hypothesis provides a theory of endogenous institutional change although the mechanism of the change is left in a black box. According to Daniel Bromley, such a theory of endogenous institutional change does not add any new value to the existing literature. To quote from his new book *Sufficient Reason*,

[T]he project is doomed on logical grounds. Once something is made endogenous, it is no longer capable of being explained by the structure within which it is embedded. By virtue of its embeddedness, it is now indistinguishable from the system of which it is a part—the “two” things are, in fact, one thing. (Bromley 2006, 70)

According to Bromley, economic gains are defined by institutions. Therefore, to use economic gains to explain the change in institutions is tautological. Note that economic gains are aggregate gains. If we analyze the mechanism of change and consider the economic gains of individual actors, using economic gains to explain institutional change is not only logically viable but also has the potential to create interesting theories. However, focusing on individual actors brings in intentionality; that is, deliberate and purposeful human actions aimed at making a mark on the institution being built.

This forces us to add ideology to our tool box to explain institutional change. Economic gains are important for individuals, but ideological beliefs can be equally, if not more, important.

In his book, *Understanding the Process of Economic Change*, Douglass North tries to develop a coherent theory of institutional change revolving around the concept of human intentionality, or human consciousness, the term he prefers to use often. However, he uses the term primarily in the negative sense. In his words,

The key to understanding the process of change is the intentionality of the players enacting institutional change and their comprehension of the issues. Throughout history and in the present world, economic growth has been episodic because either the players' intentions have not been societal well-being or the players' comprehension of the issues has been so imperfect that the consequences have deviated radically from intention. (North 2005, 3)

North rightly emphasizes the role played by human intentionality in institutional change; however, he prefers to treat it as the major cause for stagnation rather than a factor contributing to changes. This one-sided story ignores the role played by the great human minds of the Renaissance, the Enlightenment, and even Soviet socialism, which North considers as an example of imperfect comprehension of the issues by humans, in changing the world for the better. Imperfect comprehension and experimentation may not be entirely bad for humans in the long run because we learn from our mistakes. It is undeniable that the socialist movement in the nineteenth and twentieth centuries changed the world permanently and contributed to our understanding of how to organize our society and maintain a balance with nature. Even in the case of countries that did not experience a socialist revolution, the threat of a revolution led to great enhancement of their welfare systems which, by and large are good for ordinary citizens.

It appears that North still holds on to his early theory of treating economic gains as the only factor for institutional changes that are for the betterment of society. Intentionality is added to his theory only to explain stagnation. As opposed to North, Bromley treats human intentionality as a positive factor leading to institutional arrangements that advance the welfare of humans. In particular, he distinguishes human intentionality from economic efficiency. This is shown in his example of Robert Owen's reform concerning child labor in nineteenth-century Britain:

When reformers such as Robert Owen pressured the British Parliament to modify working conditions in the cotton mills, the debate undoubtedly focused on the life prospects of very young children laboring twelve to sixteen hours per day. The mill owners could certainly be counted on to raise economic arguments against a change in the rules.... By casting a social choice of this nature in purely economic terms, we see immediately that the debate gets framed in economic-efficiency terms. The reformers could only fall back on the argument that it was uncivilized at this time in history to have children in the mills rather than in school. The opponents of institutional change

would likely cast the debate so that static calculations of an economic kind were advanced as arguments against a new institutional arrangement that has little to do with economics, yet a great deal to do with alternative visions of the future—children who are in school rather than in the mills. (Bromley 2006, 8)

According to North, institutions are man-made constraints on human behavior; that is, he views institutions from a present-day perspective. However, according to Bromley, an institution is not merely constraints, but is, following John R. Commons's definition, collective action that constrains, expands, and liberates individual action (Commons 1924). Institutions expand individual actions because they empower individuals by providing them capabilities that they would not have without these institutions. For instance, if a person is bullied by a muscular man on the street, he or she does not need to fight with him, but can call the police to arrest the man. Institutions liberate individual actions because they can remove the constraints imposed on individuals—African-Americans in the southern states of America were liberated from slavery by the Emancipation, a great institutional change in American history. To view institutions in this manner is to focus on their role in defining the allocation of interests in the future. That is why human intentionality can play a positive role in institutional changes that lead to the betterment of humans. Banning child labor would, of course, reduce the current economic efficiencies and even improve children's welfare; but such a change will also bring about new changes that will move the society toward a better future. For example, the government, under the pressure of parents or even the increased rate of crimes committed by unemployed teenagers, will have to consider providing assistance to poor families so that they can afford to send their children to school. This was exactly what happened in Britain. It is the first country that introduced a mandatory education system.

The above discussion does not imply that the author favors Bromley more than North. Both are great thinkers and contribute genuine scholarship to our understanding of institutional change. Human intentionality could be both a positive factor and a negative factor in fostering institutional changes that advance human welfare. This leads us to the discussion of ideology, the backbone of human intentionality.

4.2 IDEOLOGY AND INSTITUTIONS

An ideology is a set of beliefs about what constitutes a desirable world and how this world should be organized. People form ideologies to make sense of or discredit the existing world order and to build new orders. Twentieth-century China was highly ideologically driven. This has been true for any country going through a period of great transformation from the pre-modern to the modern world. The first 30 years of the People's

Republic of China were even more ideologically driven, which was both good and bad. Without an account of how ideology changed, it is futile to find a theory to explain any institutional change in this time period and the ensuing reform period.

We can distinguish two levels of conviction in an ideology. One is its core beliefs that consist of abstract notions about the relationship between human beings and the relationship between humans and nature. The other level is its operational part consisting of the operational rules that its holders believe are vital to achieve the goals set by its core beliefs. When they are put into action, this part of ideology becomes a coherent set of institutions. Communism believes that everyone should be made equal, and private ownership is the most important obstacle toward achieving that goal. As a result, communist societies eliminate private ownership and its auxiliary allocation device—the market—and establish public ownership and its auxiliary allocation device—planning. Socialism also believes that everyone should be made equal, but holds a different view on how this goal should be achieved. It admits markets as a sensible device for resource allocation while keeping a vigilant eye on its vices. Equality is to be obtained by redistribution of income rather than the elimination of private ownership. Capitalism—in its basest form—believes that individuals should be responsible for their own fortunes and mishaps. Therefore, it defends private ownership—a feature that is best summarized by the title of James Buchanan’s book *Property as a Guarantor of Liberty* (Buchanan 1993)—and allows the market to flesh out its relentless might. In all three cases, ideology defines institutions.

According to Bromley, ideology or beliefs (the term he prefers to use) are always about the future. He distinguishes between two kinds of causes. One is what he calls mechanical causes. These are what we frequently find in conventional economic theories. For example, an economist would try to find the causes for the ban on DDT from a cost-benefit point of view. However, these causes, if they exist, are merely mechanical ones because they are only concerned with the circumstances existing today. The other kind of causes is equivalent to the final cause used in philosophy. They are about the future but also provide the *reason* for us to act today. In his words,

Final cause permits us to understand that DDT was banned not because it was suddenly economically efficient to do so (a mechanical cause), and not because environmentalists suddenly acquired more “power” vis-à-vis agricultural interests (an ex post rationalization). DDT was banned because there gradually evolved a new collective commitment to the idea that bald eagles, and perhaps other animals, were worth the disruptions to pest control in agriculture—not “worth it” in welfare economics terms, but simply worth it in terms of creating a *future* that, on balance, seemed the better one to embrace. (Bromley 2006, 13; italics added)

Thus defined, ideology becomes a driver for change. We do not need to, and we usually do not, evoke current gains and losses to argue for a change. “Pragmatists would suggest that we were able, collectively, to *mobilize better reasons* for a future with bald

eagles than without them” (Bromley 2006, 14; italics added). That is, initiating a change is mainly about competition among different ideologies, which are all concerned with the distribution of interests in the future. However, Bromley has neglected the other side of ideology; namely, it is often a slow parameter with respect to time. Once it is established, it is often the case that an ideology gets tied up with reputation and even survival of a person or a group of persons. That is why, as history shows, it usually took a war to change the mainstream ideology in a country. To a lesser extent, ideology has been more frequently used by one group of people as a political weapon against another group of people, especially in countries dominated by a single ideology. This was no more evident in the Cultural Revolution than when Mao accused his old comrades like Liu Shaoqi of betraying the communist ideology and used this excuse to eliminate them. To an even lesser extent, ideology can be used by people as an economizer facing uncertainty. Just like traditions save people’s decision costs by following a set of predetermined rules, ideology provides regularities to people’s actions and thus saves both the holder’s decision costs and other people’s costs in finding out the holder’s possible actions under a certain circumstance. It is also noteworthy that it is a functionalist view to see ideology as an economizing device. For example, when studying other subjects, it is natural for economists to focus on the functional role of ideology because this makes it easier for them to apply the standard analytical tools of the discipline.

However, current economics in the neo-classical tradition is inadequate in providing an account of ideology and its changes. This is because this tradition critically relies on two related but unrealistic premises. One is that the likelihood of the future state of the world can be represented by a probabilistic distribution; the other is that the economic agent is rational in the sense that he has full foresight—being able to know the characteristics of all future states and their probabilistic distributions—and the ability to find the most economic ways to advance his objective. Both are very strong assumptions. Let us first take a close look at the first assumption.

The first rebuff that comes to one’s mind is that this assumption does away with the kind of uncertainty initially defined by Frank Knight. By uncertainty, Knight implies a condition in which people have no clue about how to form any meaningful distribution about the likelihood of possible events. What the assumption deals with is risk, which may only exist in areas such as a stable financial market where a long time series of data is available for researchers to establish a meaningful distribution of events. North (2005) distinguishes two kinds of uncertainty that human beings have to constantly face. One is associated with our physical environment. “A general characteristic of human history has been the systematic reduction in the perceived uncertainty associated with the physical environment and therefore a reduction in those sources of uncertainty to be explained by beliefs embodied in witchcraft, magic, and religions” (ibid., 16).

The other kind of uncertainty is associated with our increasingly complex human society. Again, in his words,

But if uncertainty associated with the physical environment has declined, a consequence has been a vastly more complex human environment. And, while we have made some progress in understanding this human environment, our understanding is very limited and characterized by an immense amount of non-rational explanation. Part of the reason for our limited understanding is that there do not appear to be any fundamental “power laws” in social sciences comparable to those in the physical sciences. A more fundamental reason is the non-ergodic nature of the world we are continually altering. An ergodic economy is one in which the fundamental underlying structure of the economy is constant and therefore timeless. But the world we live in is non-ergodic—a world of continuous novel change; and comprehending the world that is evolving entails new theory, or at least modification of that which we possess. (ibid.)

Because human society is under constant changes and becomes increasingly more complex, uncertainty is a reality that we humans have to face in our daily life. For that, “[t]he tendency of economists to carry over the rationality assumption in undiluted form to more complex issues involving uncertainty has been a *roadblock* to improving our understanding of the human landscape” (ibid., 23–24; italics added). Indeed, insisting on rationality will do away with any attempt to explain institutional change—human actors would know all the characteristics of the future states and the likelihood that they would happen, so they could design optimal institutions that would specify a set of contingent rules for all the future states. This is clearly demonstrated by Maskin and Tirole (1999) in their debate with Oliver Hart on incomplete contracts. Their argument is that complete contracts are possible if economic agents are assumed to have full foresight. Institutions are social contracts so they can be made complete, or optimal, if human actors are fully rational. In order to study institutional change then, we have to give up the assumption of full foresight and adopt a more realistic view about rationality.

Without the assumption of full foresight, we would then be entering a world of uncertainty. According to North, this is where beliefs and institutions come in to play important roles. Indeed, “[t]he beliefs and institutions that humans have devised *only* make sense as an ongoing response to the various levels of uncertainty that humans have confronted and continue to confront in the evolving physical and human landscape” (North 2005, 14–15; italics added). While the use of the word *only* can still be debated on—North, here, excludes the possibility of beliefs and institutions as tools for humans to advance changes—the main message of the quote is clear: beliefs, or ideology, as we call it, can serve as an economizer for people to deal with uncertainty. In the first place, ideology helps us to make sense of what we do and observe, which often gives us the reason to live. On the other hand, remaining faithful to the old ideology provides a degree of certainty that helps to guide one’s actions. Human beings are risk averse and only a tiny number of

risks can be insured by external means. In order to avoid uncertainties, we often find ourselves taking short cuts to the safest option instead of taking risks to achieve more gains. It is also usually safest to adhere to the old ideology when new developments appear to challenge it simply because the old ideology is followed by most people. Going against the current is always more dangerous than following it. This is one of the reasons why Mao was able to wield huge political movements without much resistance from below.

As in the case of intentionality, Bromley and North provide complementary views on the role of ideology. While Bromley views ideology as a driver for change, North prefers to treat it as a device that brings certainty. We will continue to find that they are diametrically different in their opinions about the role of ideology in institutional change. However, this only reinforces the conclusion that ideology has to be treated as an indispensable part of any theory that tries to explain institutions and their changes. As a reminder to the reader, the author would like to point out here that in subsequent discussions, we will refrain from discussing the replacement of ideology through war or political plots, but concentrate on ideological changes under civil conditions.

4.3 VOLITIONAL PRAGMATISM AND INSTITUTIONAL CHANGE

North (2005) tries to model human intentionality from an evolutionary point of view. In response to the question “What is the underlying force driving human intentionality?” North says, “It is the ubiquitous effort of humans to render their environment intelligible—to reduce the uncertainties of that environment. But, the very efforts of humans to render their environment intelligible result in continual alterations in that environment and therefore new challenges to understanding that environment” (North 2005, 4–5). It then seems natural for North to propose that ideology, which is a construct of human intentionality—should change in response to the new challenges. Yet, North goes the other way. Whenever ideology is mentioned, North quickly points out that it is a force that retards economic change. According to him, ideology is always associated with conformity and is thus, anti-change. In his words,

The powerful influence of myths, superstitions, and religions in shaping early societies came from their role in establishing order . . . and conformity. Ideological conformity to this day is a major force in reducing the costs of maintaining order, but it comes with the additional societal costs of preventing institutional change, punishing deviants, and serving as the source of endless human conflict with the clash of competing religions. Thus the expansion of consciousness is not only the source of the wonders of human creativity and the rich civilizations that humans have created but also a source of intolerance, prejudice, and human conflict. It could hardly be otherwise given its central role in human intentionality. (ibid., 42)

It appears that North is still trying to seek a solution to the question he posed in his 1981 book *Structure and Change in Economic History*: “Why some countries such as Spain failed to adopt the right institutions that led countries like Great Britain to the Industrial Revolution?” His early answers to this question were linked with transaction costs. That is, some countries had failed to adopt the right institutions because the transaction costs of adopting them were too high. However, this answer is more like an ex-post rationalization than an explanation steeped in historical contexts. In his 1990 book *Institutions, Institutional Change, and Economic Performance*, North began to evoke ideology as a cause for stagnation. Finally, in his 2006 book *Understanding the Process of Economic Change*, North provided a detailed account on how ideology has been the main cause for stagnation. A comparison of the ideologies of North and Bromley reveals that North’s account does not provide a complete picture of ideology. The fundamental fallacy of this one-sided story is that it fails to realize that ideology can change in response to the changes in the physical and societal environments where human beings draw upon sources to form their ideology. For a theory on ideological changes, we need to turn to the concept of volitional pragmatism developed by Bromley (2006).

It is difficult to imagine that China’s economic reform could have even started if the CCP leadership had been a group of ideological fanatics. There were hardliners who stuck to the radical legacy created by Mao Zedong in the Cultural Revolution; however, a majority of the CCP leaders were quite flexible in their ideological convictions. To them, the core convictions could remain intact, but the practical component—ideas about how the society should be organized to advance the goals set by the core convictions—could always be changed. The following is what Bromley defines as pragmatism:

Pragmatism starts from a fundamental denial that the human mind is a mirror of nature. Instead, pragmatists insist that our individual comprehensions of the settings and circumstances within which we are situated are necessarily limited to impressions of the world around us. And, most important, different individuals necessarily formulate and hold different impressions. . . . Pragmatists insist that there is no single true and reliable report to be sent back by earnest observers and reporters who venture out into some singular reality. (Bromley 2006, 138–39)

This is not radically different from what North also emphasized: “[w]e [humans] do not reproduce reality; rather we construct systems of classifications to interpret the external environment” (North 2005, 33). However, Bromley disagrees with North by continuing to note:

As sapient beings, each of us apprehends settings and circumstances within which we are situated, but especially as we move through *new* settings and circumstances. These apprehended phenomena become our impressions of those settings and circumstances. (Bromley 2006, 139; italics added)

The word *new* is very important here. While North merely notes that we construct cognitive models based on the external environment, Bromley emphasizes that we develop impressions—the raw materials for us to construct ideology—when we encounter new settings and circumstances. We do not react to things that we are used to, but are excited by new things. This is similar to when we walk into a room that has a bouquet of flowers. We can smell the fragrance of the flowers for the first few minutes after we have walked into the room, but after a while we fail to notice the fragrance. Since our external environment is constantly changing, we have many opportunities to obtain new information. In this way, Bromley considers ideology to be dynamic.

Since what we know about the external environment is only our impression of it, the truth cannot be established by merely debating about it based on our differing impressions. According to Bromley, there is indeed no ultimate truth, but only accepted dominant beliefs, often temporarily, by the majority of people in a certain arena. This view is quite different from the Positivist tradition in science. The CCP is somewhere in between. It is pragmatic because it believes that ideology should change in response to the changes in reality; it is positivistic because it believes that there exists an ultimate truth and it is possible to find it through practice. This was reflected by the conclusion reached in the “truth debate” within the CCP at the end of 1978: “Practice is the only criterion to test the truth.” While the author sympathizes with Bromley’s view from a purely academic stance, he also believes that the position taken by the CCP is vital for a practitioner to accomplish things. If he believes that there is no ultimate truth, what is the purpose of his taking any action? When it comes to the change in ideology, we will soon see that the CCP’s approach fits perfectly into Bromley’s notion of volitional pragmatism. However, here, let us first discuss the implications of pragmatism on institutions.

We notice that when it comes to institutions, pragmatism has two basic principles. One is that the existing institutional arrangements are only reasonable responses to the current economic and social settings; they are by no means optimal. The other is that the existing institutional arrangements are always open for changes because new opportunities and new ideas will appear as the future unfolds itself. Both are humble positions in terms of one’s view about human capacities. The CCP has always been humble in this sense. Unlike the Russian communists who were bestowed with an easy revolution, it took 38 years for the CCP to complete its revolution. Meanwhile, the CCP made numerous mistakes, some of which were even fatal. Instead of becoming arrogant while it celebrated victory over the Nationalists, the CCP remained vigilant about the difficulties it would face in building a new socialist China. As Mao described when he led his comrades into Beijing in 1949, “We are coming to take the exam.” When he discusses the implications of the Great Famine, D. Yang (2006) is correct on one account; that is,

the CCP leadership had become more cautious, and even conservative—as manifested by its refraining from spreading the Cultural Revolution to rural areas—in its policy toward the countryside. The pragmatism of the CCP was a hard-earned product of the lessons it learned from its struggle for power and the mistakes it made in consolidating power.

However, pragmatism is only half of the story. Without volition; that is, intentional actions taken by human actors, pragmatism could remain a passive conviction and be prone to falling into the constraints of ideology. Bromley uses the word *volition* to emphasize the role of the human will in making things change. He also uses the word to stress that pragmatists should leave the door open to the future. According to him,

Human choice and action is properly characterized as prospective volition—the human will in action, looking to the future, trying to determine how that future ought to unfold. As this process evolves, individuals (and groups of individuals) bring contending expressions and imaginings to the task of choice and action. Individuals (and groups) do not know precisely what they want until they are able to work out what they seem able to have. (Bromley 2006, 148)

This is like an explanation and extension of the slogan: “Practice is the only criterion to test the truth.” The moderates in the CCP were volitional pragmatists; they believed more in practice than in ideological convictions. Since people stick to ideology to avoid uncertainties, passivity would put off the incentive to innovate. Institutions change only when they encounter surprises—events that do not fit into the mode defined by the existing ideology but nevertheless bring desirable outcomes. Merely waiting for nature to reveal itself may not be adequate to find all the surprises; that is, the potential to improve the existing institutions. Intentional human actions provide a critical way to find and test these potentials. Human actions change nature as well as alter human relations. Since individuals have varied backgrounds, aptitudes, and capabilities, decentralized human actions are better than centralized ones in discovering new opportunities for improving upon the existing institutions.

Having discussed the above, we can now sketch the model of institutional change as ideological discontinuity. This model is a combination of North’s notion of ideology as a set of beliefs providing people predictability and order and Bromley’s notion of ideology as a driver of change.

An ideology is a set of beliefs about what constitutes a desirable world and how this world should be organized. A coherent set of institutions is the working rules that an ideology requires for its implementation; they define human relations in a way to help obtain the world order desired by the ideology. Institutions change only when the ideology of major actors changes or when the configuration of ideology in the society changes. The latter is more likely to happen in a democratic society where the votes of ordinary

citizens count and institutions change to respond to the changes in the ideology among the citizens. In the case of China during the planned economy period, the CCP leadership decided upon the institutions, and these institutions changed when the ideology of the CCP leadership changed. For now, we will frame our discussion in a setting where a single agent is responsible for setting up institutions.

First, we note that ideology does not change overnight because people have invested in it and are using it to direct their daily behavior and judgments; it is a cost saver for most people. The agent changes his ideology in response to surprises brought about either by his own actions or others' actions. Surprises are most likely to occur when the actions reach the limit set by the existing institutions. Small alterations or violations of the existing institutions may produce desirable results; that is, results that help to advance the objective set by the ideology—for example, a more equal society in the case of communist ideology. These results then become surprises and the agent begins to wonder whether the existing institutions should be revised. However, after they are revised, the institutions may no longer be consistent with the operational part of the ideology; that is, the part that specifies how the society should be organized. Now, the agent has to decide whether to hold on to his ideology or to give up part of it. There is an internal struggle here. If the agent on to the operational part of his or her ideology, he or she will lose the opportunity to improve upon his or her objectives; if the agent advances his or her objectives, he or she would have to give up part of his or her operational ideology. The outcome depends on the gains that can be achieved by revising part of the operational ideology (and adopting its associated institutions) and the costs associated with the revision. The calculation always involves complicated algebra. While the gains are most likely to be material in nature and easy to calculate, the costs are more likely to be associated with intangible factors such as fame, reputation, and legitimacy whose values depend on how others perceive them. Reckless moves may bring huge deficits in these factors. Gorbachev made this mistake when he started perestroika in the Soviet Union. His reform did not bring the intended gains but instead deeply hurt the reputation and legitimacy of the communist party. The CCP was more prudent than Gorbachev. It has successfully revised its ideology one step at a time. These steps were large enough to bring real gains, but they were also small enough not to invoke questions about the CCP's legitimacy. There were no climaxes or momentums, but seemingly ordinary steps accumulated to complete a major transformation in China's history. In the meantime, the CCP has also transformed itself from a revolutionary party to a ruling party.

In summary, institutions change when ideology, especially its operational component, changes. Ideology falters when human actions spring surprises that test the boundaries of the existing institutions. The changing of ideology depends on the gains and costs associated with that change.

4.4 A MUDDY ROAD TO THE MARKET

In the last 30 years, the CCP has undertaken a series of ideological shifts—some small, some large—but their cumulative effects have been substantial. Maybe its core conviction of building a strong and equitable China has not changed, but its ideas about how the society should be organized toward that goal have been radically changed. It has transformed China from a public ownership-based central planned economy to a market economy of public-private mixed ownerships. This has been a muddy road; there have been turns and setbacks, but the process of reform has continued unfazed. The second part of this book provides detailed accounts of these turns and setbacks in specific reforms. At this juncture, let us summarize the major ideological shifts of the CCP in the last 30 years, in order to get an overall picture.

The Third Plenum of the CCP's Eleventh Party Congress held in November 1978 has been recognized as the starting point of China's economic reform. However, the seeds of reform were planted in the early 1960s after the disastrous consequences of the Great Leap Forward. In his book *Calamity and Reform in China*, Dali Yang believes that the root of China's rural reform was the famine that followed the Great Leap Forward, which claimed the lives of 15 to 30 million people depending on the estimation method used (D. Yang 2006, 37–38). While it is still debatable whether the Great Famine was the single most important cause of the rural reform, the events of the early 1960s undoubtedly had an impact on China's economic reform. For one thing, most of the moderates in the CCP were either prosecuted or expelled from official positions during the Cultural Revolution, and when they came back to power at the end of the 1970s, their memory of government policies started with the early 1960s before the Cultural Revolution started. Perhaps, the most important lesson they could learn from the early 1960s was that family contracting worked better than the commune system. As an emergency measure in response to the Great Famine, family contracting was permitted in agriculture to stimulate agricultural output. It worked quite well, but was stopped by Mao Zedong as soon as the effects of the famine had subsided.

In his later years, Mao was performing a balancing act between the radical “Gang of Four” headed by his wife Jiang Qing and the moderates that were hardly organized. In the end, he selected Hua Guofeng, a moderate radical and a long-time official from Mao's hometown Xiangtan Prefecture, to succeed him. However, Hua faced imminent challenges from the Gang of Four with regard to his succession. This brought him closer to the pragmatic segment of the party, which was then headed by Ye Jianying, one of the few senior leaders who had survived the purges of the Cultural Revolution. Ye persuaded Hua to arrest the Gang of Four a month after Mao's demise in September 1976. Between 1976 and 1978, Hua and his associates controlled the party. However, without

a political base in the party, Hua claimed his legitimacy as a successor to Mao by clinging to the “two whatevers”—“Whatever policies Chairman Mao formulated, we shall all absolutely defend; whatever instructions Chairman Mao gave, we shall all steadfastly abide by.” At the policy level, he advocated enhancing collective farming by raising the accounting unit from the team level to the county level, an institutional arrangement reminiscent of the large communes of the Great Leap Forward. It was not as though Hua was not aware of the dire situation in the countryside; he merely believed that radical policies could solve the problem as well as bring more legitimacy to him.

However, the moderates were growing increasingly impatient with Hua’s insistence on the virtues of the Cultural Revolution, which they saw as both a personal and societal disaster. They began planning counterattacks on Hua. Deng Xiaoping was reinstated to the post of vice chairman of the CCP and vice premier of the State Council in 1977. He orchestrated an attack on Hua at the end of 1978 by initiating the now famous “criterion of the truth debate.” The debate was directed toward the two whatevers. In the end, the moderates won and summarized their victory in the historical Third Plenum of the Eleventh Party Congress held in November 1978 in the following slogan: “Practice is the only criterion to test the truth.” Hua and his associates had to undergo self-criticism during the work meeting preparation for the Third Plenum. Although he held the post of CCP chairman until 1980, Hua was reduced to a political figurehead after the Plenum.

The Third Plenum is a good example of an ideological shift for initiating institutional changes. Before the Plenum, there were no changes to the institutional settings in China. By refusing the two whatevers, the Third Plenum served as a landmark for the CCP to adopt a pragmatic view toward its political convictions and economic policies. It opened the door for change.

The rural reform was a bottom-up reform initiated by peasants and local cadres. During 1979–1981, there were intensified political fights at both the central and local levels. It was a period that witnessed an intense interplay between local experiments and the center’s ideological revision. The driving force for both local experiments and the center’s ideology to converge to family farming was the continuous successes of the intermediate reforms between collective farming and family farming. They showed that everyone, including peasants in the poorest regions, could benefit from the reform. That is, the rural reform brought about a Pareto improvement to the society. Grain supply was an issue of paramount significance at the time. The success of the rural reform to significantly raise grain output converted the most stubborn minds in the CCP.

Buoyed by the success in the countryside, the CCP announced urban reform in 1984. It set two goals. One was to reduce the extent of economic planning and the other was to introduce incentives in state-owned enterprises (SOEs). For the first goal, an intermediate form of dual-track price system was introduced. With regard to firms’ sales

and material supplies within the planned quotas, they received or paid planned prices; for firms' sales and material supplies above the planned quotas, they received or paid market prices, which were higher than the planned prices. Although it led to rampant corruption, this dual-track system provided huge incentives for firms to expand their outputs. It also gave township and village enterprises (TVEs) great scope to survive. Inside the enterprises, however, the effects of the reform were more limited. Inspired by rural reform, contracting was introduced in the SOEs, partly because it did not change the ownership so the SOEs were still regarded as socialist firms. In this case, we see that ideology functioned as a constraint to institutional change. The managers were rewarded when they performed well, but did not get credible punishments when they failed. As a result, this ill-conceived reform did not survive.

It is noteworthy that at that time, the CCP's ideological position had not been changed in official documents. Then, in October 1987, during its Thirteenth Congress, the CCP formally announced the theory of "the primary stage of socialism." The main contents of this theory were summarized as "one central theme and two basic points." The central theme was economic construction, and the two basic points were to hold on to the four basic principles (socialism, people's democratic dictatorship, the leadership of the CCP, and Marxism-Leninism-Mao Zedong thought) and to hold on to reforms and opening up. The Congress also formally announced the CCP's new goal to "take the socialist road with Chinese characteristics." The primary stage theory had allowed letting go of the old conviction of building communism in China. By adopting economic construction as its central theme, the CCP has forged what the author of this book refers to as "the growth consensus"—every bit of the party's effort should be directed toward building a prosperous and strong China. Although its ideological core that reflected the four basic principles remained intact, the CCP was now ready to adopt any institution that would serve its central theme of economic growth.

It is worth noting that to a large extent, the primary stage theory was only an acknowledgement of what had already occurred. The rural reform and the newly started urban reform had already crossed the boundary defined by the old notion of socialism. However, the 1989 Tiananmen Square Event caused a major setback to the reforms in China. It was Deng Xiaoping's south tour in the spring of 1992 that re-opened the door to further reforms. The CCP's Fourteenth Congress was held in the same year and it pledged to continue on the socialist road with Chinese characteristics. A landmark change in the CCP's ideology came about in the Third Plenum of the Fourteenth Party Congress held in 1993. The CCP announced that the aim of the reform was to build a "socialist market economy" in China. The key task was "to establish a modern enterprise governance system that met the requirements of the market economy"; in particular, property rights would have to be clearly delineated, duties and rights would

have to be properly defined, and the government would have to be separated from the firm. As compared with the primary stage theory, this new “socialist market economy theory” was not merely an acknowledgement of reality, but served as a guideline for the economic reforms in the 1990s. Indeed, all the toughest reforms—the full-fledged abandonment of the planned economy, structural adjustment, SOE privatization, and the social security reform—occurred in the 1990s.

The reforms of the 1990s have accelerated China’s pace toward a mixed-ownership economy. Their outcomes were acknowledged in the 1999 revision of the Constitution, which clearly states that private economy is an important part of the Chinese economy. Then, in its Sixteenth Congress held in 2002, the CCP revised its own charter. The CCP no longer represents only the proletarians; instead, it represents “the requirements of the advanced productive forces in China, the future direction of China’s advanced culture, and the essential interests of the vast majority of Chinese people.” These are the so-called Three Representations. The CCP has since formally declared that it will become a party of the country rather than that of the working class. This declaration was not new considering the workings of the CCP during the 1990s. The structural adjustment and SOE privatization in the 1990s had shown that the CCP had given up its role as the guardian of the interests of the working class. In other words, it had become disinterested in the society, which, thus far, has been good for China in terms of its overall economic growth.

However, the growth consensus has also left many problems unsolved and has accumulated many more on its path to sustain high economic growth. One major consequence of the spearheaded growth in the last 30 years has been the wide income gaps between the coastal and inland regions and between the rural and urban residents—with the urban per-capita income being 3.3 times the rural per-capita income, China has the largest urban-rural income gap in the world. There are also 22 million urban residents who are on government welfare system. In addition, fast economic growth has caused tremendous environmental problems that even threaten the daily lives of ordinary people. Under this circumstance, several new initiatives have been undertaken in the Hu Jintao-Wen Jiabao government; these initiatives are aimed at reversing the trend and their central theme is to build a “harmonious society.” The official document “Decision on Several Important Issues in Building a Harmonious Society” issued by the Sixth Plenum of the Sixteenth Party Congress held in October 2006 defines such a society as that which features “democracy and the rule of law, fairness and justice, honesty and mutual love, energetic dynamics, peace and order, and harmony between man and nature.” The key words are *fairness* and *justice*. In practice, the most important policy has been to increase investment in public facilities, health care, education, and subsistence maintenance in the countryside through the “Socialist New

Countryside” program. For each year of the eleventh five-year plan period (2006–2010), RMB 260 billion have been planned for investments in the countryside and agriculture-related projects. Roads in the countryside will be improved; public utilities will be built in selected villages; rural education will be subsidized; and most importantly, the rural health care system will be rebuilt.

The notion of harmonious society is an important ideological departure from the growth consensus that has dominated the CCP policies during the last 30 years. It is not an acknowledgement of what has already been happening in the field; rather, it is an attempt to remedy the negative effects brought about by the growth consensus. As the notion of the “socialist market economy” did for the 1990s, the notion of “harmonious society” is likely to shape China’s road in the next five to ten years.

Figure 4.2 summarizes the CCP’s major ideological shifts between 1978 and 2006, which we discussed above. We can identify three waves of ideological shifts in this time period. The first wave was between 1978 and 1987. The Third Plenum of the Eleventh Party Congress held in 1978 started the reform process by giving up the radical ideology of the Cultural Revolution and adopting a pragmatic approach toward economic institutions. Subsequently, the Thirteenth Party Congress held in 1987 acknowledged the reforms implemented since 1978 and summarized them in the “socialist primary stage” theory. The second wave started in 1993 and ended in 2002. The Third Plenum of the Fourteenth Party Congress held in 1993 proposed the concept of a socialist market economy and started the largest wave of reforms in the 1990s. The conclusion of this wave of ideological shift was the announcement of the Three Representations in the

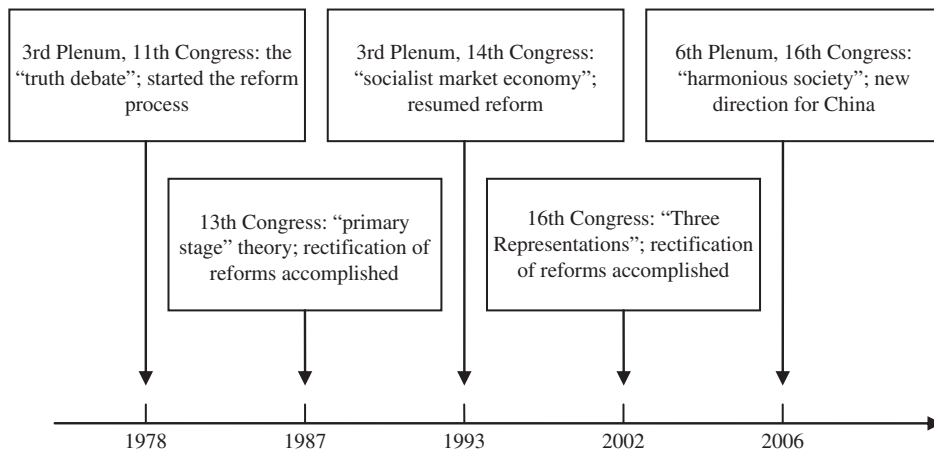


FIGURE 4.2 CCP’s major ideological shifts: 1978–2006

Sixteenth Party Congress held in 2002. The CCP transformed it from a working class party to an all-people's party. The third wave has just started; its symbolic move was the announcement of the concept of harmonious society by the Sixth Plenum of the Sixteenth Party Congress in 2006.

The common feature of the first two waves is that they both started with a new ideological direction and ended with a theory summarizing and rectifying what had occurred since the start of the wave. The third wave also started with a new direction, and it is interesting to observe whether it will end with a summary theory in about 10 years. As asserted by North, old ideologies have indeed been impediments for changes. Nevertheless, new ideologies have opened up opportunities for changes. There is an underlying assumption in North's assertion—there exists a set of best practices out there and a country will automatically move to obtain it as long as the ruling party is not bound by some ideology. This assumption contradicts with North's emphasis on the role played by uncertainty in leading people to form ideologies. If uncertainty is so pervasive, as North has rightly pointed out, why is he sure that there is a set of best practices out there? It appears that North has also been contaminated by the fallacy, sharply criticized by Bromley, that treats the market as "some prior and allegedly natural entity." But "[t]here is, after all, no such thing as the market. There are, instead, arenas of exchange that are the product of prior human creation. Any market is a social construct, and changes in the parameters of that construct—new institutional arrangements—are also human creations." (Bromley 2006, 32–33) With this view of the market, we would have a better understanding of how the CCP's ideological shifts have helped China to construct a sound market economy. Such a market economy is not "out there" for China to grab; rather, it has been constructed by the exploration-summarization cycles embedded in the CCP's waves of ideological change. It is an entity in constant making. While the first two waves of the CCP's ideological shifts had marched ubiquitously toward the market, the start of the third wave has witnessed a notable ideological reorientation that begins to question some aspects of the market and tries to implement concrete policies to remedy them. When the summarization day arrives, the CCP, and the country as a whole, is likely to have a fuller and more sophisticated understanding of the market than it did in its first two waves of ideological shifts.

It is worth noting that the ideological shifts of the CCP have not been a linear process even during the first two waves. There have been stoppages and setbacks, noticeably between the first and second waves. The start of the third wave also took a while, mainly because the Hu Jintao-Wen Jiabao government needed time to consolidate support within the country. The road has been muddy. But a muddy road might be better than a clean road because it forces the decision makers to think thoroughly where they would like to lead the country.

4.5 CONCLUDING REMARKS

We began this chapter by discussing the role of human intentionality in defining and selecting institutions. Contrary to the conventional view among economists treating institutions as equilibrium sustained by atomistic rationality, we have argued that institutions emerge precisely when equilibria do not exist to sustain cooperative results. Viewing institutions in this way provides ample room for human intentionality to play a positive role in institutional building. We then moved on to discuss the relationship between ideology—the backbone of human intentionality—and institutions. In doing so, we have tried to synthesize the contradicting views of North who considers ideology to be a force against changes and of Bromley who considers ideology as a key driving force for changes. Based on the notion of volitional pragmatism, we built a narrative model of institutional change as ideological discontinuity. This model emphasizes the role of human actions and decentralized experiments in exploring new opportunities of institutional change. Finally, we reviewed the major ideological shifts of the CCP during the period 1978–2006. We have found an exploration-summarization cycle in these shifts; we have also found that ideological exploration has played a positive role in shaping China’s path to economic reform.

We can conclude this chapter by recapitulating the relationship between volitional pragmatism and the doctrine “practice is the only criterion to test truth,” and how they have both been manifested by the CCP’s ideological shifts in the last 30 odd years. Pragmatism as defined by Bromley treats human knowledge as a collection of impressions received from nature and human society. The CCP leadership agrees with Bromley in that there is no ultimate truth that can be found in one theory. However, it has placed more emphasis on taking actions, or in their own words, using practice, to move closer to the truth. This emphasis makes them almost volitional pragmatists, albeit with a subtle but important difference. While Bromley uses the word *volition* to emphasize human will; that is, people’s construct of the future world, for the CCP leadership, this word—if they would ever use it—would mean the will to act rather than a construct of the future, especially in China’s early stage of reform. During that stage, few people were sure about where China should head: Revised socialism? Socialism with some capitalist flavor? Or straightforward capitalism? There were no definitive answers. The driving forces have been actions—some decentralized and some centralized—testing the limits of the existing institutions and positive surprises resulting from these actions. In this sense, “pro-active pragmatists” may be a better phrase to describe the CCP leadership.

CHAPTER
5

A Model of Reforms in China

With the help of the building blocks introduced in the last three chapters, we are ready to articulate a model to explain how decentralization, the encompassing state, and pragmatism have worked together to make China's economic reform successful. Decentralization provides the institutional foundation for local experiments; an encompassing state ensures that the experiments with the most socially beneficial results are being promoted; and pragmatism rolls reforms forward by way of continuous ideological shifts. As readers would have come to expect from the direction Chapters 3 and 4 have taken, the model will give up the assumption of full rationality. Specifically, the model will give up full foresight of the rationality assumption. Therefore, the most suitable model is an evolutionary or learning model that provides an explicit account of how agents form their expectations in the absence of full foresight. This model is especially pertinent to our study of ideology and its evolution because one of the roles of ideology is to reduce uncertainty when people do not have full foresight.

In Section 5.1 below, we will first provide a verbal description of the model. To provide a structure to the model, we will set China's privatization process as the backdrop. However, the key ideas of the model are applicable to other reforms. We will introduce a few mathematical notions, but these will only be used to clarify the exposition. In Section 5.2, we will present a formal evolutionary or learning model using standard microeconomic theoretical techniques. Although the model is simple, those readers who find the mathematics involved too difficult can feel free to skip this section. Section 5.3 is devoted to discussions about the links between our model and the existing literature, particularly the quasi-parameter approach proposed by Greif (2006). Section 5.4 concludes the chapter.

5.1 A VERBAL DESCRIPTION OF THE MODEL

5.1.1 Settings

To start with, let us consider an economy in which there are n regions and one central government. At time 0, each region has a continuum of identical state-owned enterprises (SOEs) distributed in the interval $[0, 1]$. This continuum assumption is made to facilitate the presentation of the model in the following section. Our main ideas carry over if we assume that each region has a limited number of countable firms. In reality, firms in a region are heterogeneous; however, we will assume that they are identical because we want to focus on the dynamics between regional governments and the central government. Nevertheless, we will assume that firms in different regions have different levels of quality.

Starting at time 0, regional governments decide whether or not to privatize their firms, and if yes, how many to privatize. We assume that privatization of firms is undertaken one at a time and that there is no partial privatization in one firm. Let us use p_{it} to denote the ratio of firms being privatized in region i up to period t . Before privatization, each firm in region i contributes S_i to the regional GDP, and after privatization, contributes R_i to the regional GDP. Note that here, R_i is a value net of the cost of privatization itself. As we will show in Chapter 8, the largest cost of privatization is the reemployment of redundant workers released because of privatization. The pace of privatization in many cities has been slow only because they do not have sufficient financial resources and opportunities to retrain and reemploy the redundant workers. The gain of privatization is $\Lambda_i = R_i - S_i$, which can be either positive or negative. Both R_i and S_i are common knowledge to both the regional governments and the central government.

At time 0, the central government has a fixed ideology of the state ownership of all firms in each region. Later, it could revise it to allow for more privatization. Let us use p_t to denote the position of its ideology between full state ownership (in which case, p_t equals 0) and full privatization (in which case, p_t equals 1). A regional government may deviate from the central government's ideology, but that will lead to a punishment meted out by the central government. Here, we want to emphasize that a more conservative position taken by a region; that is, a privatization share smaller than p_t can also lead to a punishment. We assume that the punishment can be measured in monetary terms so it can be compared with the other gains and losses of regional governments. Let us use C_i to denote the monetary amount of this punishment. It is natural to view it as an increase in the extent of deviation.

Regional governments are encompassing in the sense that they care about the total GDP of their respective regions, which is $y_{it} = p_{it}R_i + (1 - p_{it})S_i = S_i + p_{it}\Lambda_i$. The net

return to the governor of region i is the total GDP net of the central government's punishment, $\pi_i = y_{it} - C_i$. He or she chooses the ratio of privatization, p_{it} , to maximize its total net gain π_i . Note that C_i increases in the extent of deviation from the ideology set by the central government. Hence, an optimal solution to p_{it} is possible. Here, we assume that privatization is reversible; that is, a privatized firm can become an SOE again. This happens in reality. We will return to this assumption later in this section.

During each period, the central government observes the ratio of privatization in each region. Similar to regional governments, the central government is also encompassing; that is, it is concerned about the national GDP. In addition, it is pragmatic toward its ideology. The critical assumption here is that it has bounded rationality. It does not have prior knowledge about what is the optimal private-public ownership mix for each region; however, it adopts a simple reinforcement learning process in determining that optimal mix. The general rule of this learning process is that if it finds that privatization increases the regional GDP, it revises its ideology toward allowing for more privatization; otherwise, it revises its ideology toward allowing for less privatization. The specifics of this rule are shown in Figure 5.1. Since there are many regions and each region may increase or decrease its privatization ratio, the central government needs to develop a rule for evaluating the impacts of privatization. Here, we assume that it bases its revision on the correlation between the progress of privatization and the change in the regional GDP. In Figure 5.1, the horizontal axis represents the change in privatization ratio during period t over period $t - 1$, Δp_{it} ; the vertical axis represents the change in the GDP during period t over period $t - 1$, Δy_{it} . A data point thus represents a region's privatization change-GDP change in period t . Using the data points of all regions, the central government can calculate the correlation between the change in GDP and the change in privatization. The figure shows a positive correlation (therefore, the regression

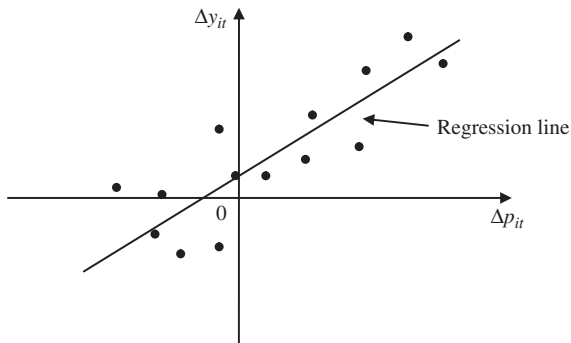


FIGURE 5.1 Central government's evaluation of local privatization

line has a positive slope), implying that the change in the regional GDP is positively correlated to the change in privatization. In this case, the central government revises its ideology toward a higher degree of privatization. However, the extent of the revision is assumed to be random; that is, the position of the new ideology can be anywhere between p_t and 1. If the correlation is negative, the central government revises its ideology downward to some position between p_t and 0. Finally, if the slope is zero, the central government retains p_t . That is, the magnitude of the marginal contribution of privatization to the GDP is immaterial—only its sign matters. This is a simple reinforcement learning process and requires only a minimum level of rationality. This is an important feature for our purpose. The assumption of strict rationality has the attractive feature in that rationality implies uniqueness and can be perfectly described using rigorous mathematical language. In contrast, there are numerous forms of bounded rationality and the adoption of a different form may lead to a different result. The simple reinforcement learning defined here has the advantage of imposing a minimal structure on the form of rationality; therefore, our results would be applicable if more structure were to be imposed.

5.1.2 The Equilibrium

With the abovementioned setup, the privatization process will be set in motion once some regions begin to privatize their SOEs and increase their GDP in period 0. These regions are more likely to be ones with higher gains from privatization so it is worth the punishment from the central government for deviating from full state ownership. The central government will observe the privatization actions of these regions and their final impact on the GDP, and will revise its ideology upward to allow for some degree of privatization. This ideological shift loosens the constraint imposed on the regions, which in turn promotes further privatization in regions that have already started privatization and brings in more regions to the rank of privatization. However, this process may not lead to a uniform convergence to full privatization because some regions have negative net gains from privatization.

In order to proceed, we require an explicit definition of equilibrium. We say that *the privatization process has reached equilibrium when the central government no longer changes its ideological position and none of the regions changes its level of privatization*. Note that the level of privatization in a region does not necessarily coincide with the central government's ideological position. Except in the case of a uniform convergence to full privatization or full state ownership, those with extra positive gains from privatization will always privatize more firms than the central government's ideology allows for, and vice versa for those with negative gains. We consider three cases in which different kinds of equilibria emerge.

The first case is when all the regions have significant negative net gains from privatization (that is, all the Λ_i s are negative). In this case, no single region will start privatization in the first place and all the firms remain SOEs. In addition, the central government maintains an ideology of complete state ownership. Note that this equilibrium is stable; that is, the system returns to it whenever a perturbation occurs. For example, some regions with small negative net gains may privatize some of their SOEs to avoid the central government's punishment if the central government sets its ideology for a positive ratio of privatization. However, the central government will quickly realize that privatization reduces the GDP and will thus scale down its ideological position until it reaches full state ownership again.

The second case is when all the regions have positive net gains from privatization (that is, all the Λ_i s are positive). In this case, the whole country will converge to full privatization. The mechanism is straightforward. As long as some regions begin to experiment with privatization, the central government will revise its ideological position upward because privatization increases the regional GDP. This relaxes the ideological constraint imposed on other regions and allows them to join the rank of privatized firms. The central government will continue to revise its ideological position upward again until it converges with the regions to achieve full privatization.

More interesting is the case in which there exist some regions with positive gains from privatization and others with negative gains. This case is complex because the dynamics depends on the mix of regions that change their privatization mixes; that is, their positions on the privatization scale of $[0, 1]$, in each stage. Let us use Ω_t to denote the set of regions that change their privatization mixes in period t . This is the decisive set of regions in period t because their moves and results determine the direction of the central government's revision of its ideology. Other regions do not have an effect because they do not change their privatization mix. It turns out that the central government's decision can be characterized by the sum of net gains, Λ_p , say, from the privatization of regions in set Ω_t . Although a rigorous deduction is technical, the intuition is relatively straightforward—if the total GDP is increased in the round of privatization in one period, it is sensible to infer that privatization increases the GDP on average. As a result of this simplification, there exists only one equilibrium.

We will use Figure 5.2 to facilitate our discussion. Remember that each region's choice of the level of privatization in each period is a function of the ideology announced by the central government for that period. Therefore, the whole dynamics can be reduced to the dynamics of the central government's ideology. In the Figure, we represent the central government's ideology of period t , p_t , on the horizontal axis, and the sum of net gains from privatization, Λ_p , on the vertical axis. The key is to show that Λ_t is a decreasing function of p_t . When p_t is low, all the regions with positive net gains from

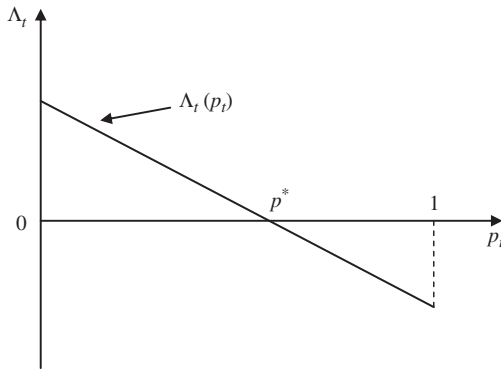


FIGURE 5.2 Determination of the equilibrium

privatization will experiment with privatization, while the regions with net losses from privatization will not. As a result, Λ_t is positive and high. As p_t increases, two events occur. One is that the increasing numbers of regions with negative net gains are forced to privatize their SOEs; their losses contribute negatively to Λ_t . The other event is that the increasing numbers of regions with sufficiently high net gains will privatize all their SOEs. Those firms will not change their privatization status and will not belong to Ω_t anymore. Therefore, the number of regions with positive gains in Ω_t decreases, leading to decreases in Λ_t . When p_t reaches 1, all the regions with positive net gains will have privatized all their SOEs, and Ω_t only has regions with negative net gains. As a result, Λ_t becomes negative. Therefore, Λ_t as a function of p_t will cross the horizontal axis once. In Figure 5.2, it is denoted by p^* , whose value is between 0 and 1. This is the central government's ideology in equilibrium. It is characterized by partial privatization. Note that this equilibrium is stable. When a perturbation leads to a p_t smaller than p^* , Λ_t is positive and so the central government raises its ideological position; on the other hand, when a perturbation leads to a p_t larger than p^* , Λ_t is negative and so the central government lowers its ideological position. This is not a satisfactory result because it does not capture what has happened in China. This is because our model is too simple and does not consider the economic interactions among regions.

5.1.3 Positive Spillovers and Convergence of Privatization

The above analysis shows that there exists a spillover effect among regions. When some regions privatize their SOEs and obtain favorable results, the central government revises its ideological position upward on the scale of privatization. This then lowers the potential costs of ideological punishment on the part of other regions that have

smaller gains from privatization, and so they will also begin to privatize. This is what has transpired. The earlier experiments and successes in some of the regions (such as Shunde and Zhucheng) convinced the central government, which in turn began to advocate for more reforms. This was not only confined to the SOE reform but was also present in the rural reform and to a lesser extent, in the adoption and abandonment of the dual-track price system.

However, in reality, there also exist other positive spillovers through economic interactions among regions. For example, Li, Li, and Zhang (2000) consider a model in which regional competition for capital leads to the spread of privatization. In that model, a regional government cares about regional GDP and for that matter the efficiency of its SOEs. However, without competition, each region can rest on a comfortable GDP growth. When a few regions begin to privatize their SOEs, capital—the most mobile factor—will then move to those regions because efficiency is higher there. This then has the consequence of lowering the growth rates of the regions without privatization, which forces them to privatize their SOEs too. This scenario emphasizes the inevitability of privatization because of regional competition. There can also be more positive spillovers of privatization. One of them is concerned with employment. The most significant constraint on privatization is the massive number of redundant workers released by privatization (See Chapter 8 for details). It is both a matter of stability and CCP's legitimacy; hence, the central government places the greatest emphasis on it. In regions with limited financial resources and a limited number of new jobs, privatization has been slow. However, there also exist regions where worker redundancy in the SOEs is not as severe as in other regions, probably because their economic geographic conditions are more favorable or a vibrant private sector has already absorbed some of the redundant workers. Guangdong, Zhejiang, and other coastal provinces are such regions. In these regions, privatization enhances firm efficiency and thus increases the demand for workers. This extra demand for workers alleviates the employment constraint placed on other regions because now their workers can migrate to the more prosperous regions.

In order to capture the above two scenarios into our model, we note that the competition story implies that regional competition lowers the contribution of the SOEs to the GDP, S_i , and the employment story implies that regional complementarities increase the contribution of privatized SOEs by lowering the costs of privatization. However, a deeper analysis reveals a two-sided story. While it drives down S_i , competition also has the effect of driving down R_i because more intensive competition squeezes the profit margins of firms. Similarly, higher demand for labor drives the wage rate upward and, therefore, has a counter effect on R_i while it alleviates the constraint of redundant workers. Therefore, the net effect is not determined in both the cases. However, the formal

model in the next section shows that we can find more structured results for the case of employment complementarities. It shows that the negative effect of higher demand for labor decreases and its positive effect increases when the degree of privatization increases. Therefore, Λ_i first decreases and then increases over time as more regions join the rank of privatization. As a result, there can be two stable equilibria—one with partial privatization when Λ_i is still decreasing and another with full privatization after all Λ_i become positive.

Note that a bolder ideological move will help convergence to full privatization. When there are no real-economy spillovers, a bolder ideological move may force regions with negative gains from privatization to privatize their SOEs very quickly, and their poor performance will lead to a large ideological retreat. That is, the system may experience large fluctuations. When real-economy spillovers exist, a bolder ideological move quickly releases the constraint imposed on regions with larger gains from privatization; their positive spillovers then raise the net gains of privatization in other regions, which can now easily privatize their SOEs. This provides an example of how ideology can serve as a catalyst for institutional change. That is, our simple model is flexible enough to accommodate both North's idea, which sees ideology as a constraint to institutional change, and Bromley's idea, which considers the creation and change of ideology more as tools for institutional change. On another front, our model shows that China's gradual approach to reform does not exclude large and sudden changes. Chinese gradualism is more about Chinese leaders' pragmatic approach to their ideology than about the time they take to reform the Chinese economic system. It has taken a long time for the CCP to shift its ideology from Stalinist socialism to a version of market socialism. As we reviewed in the last chapter, this shift comprises many smaller shifts. However, these smaller shifts have had grand implications for the economic system. For example, the first wave of privatization in the 1990s was largely related to the CCP's announcement to build a socialist market economy in 1993. Our model can be read as a representation of these smaller ideological shifts and their effects on the economic system.

5.2 THE FORMAL MODEL¹

The previous section has provided the setup and basic logic of the model; hence, in this section, we will delve into the description of the model. To facilitate our understanding, we will make two more technical assumptions. The first is that instead of assuming

1. This section draws on Li and Yao (2008).

that there are n regions, we assume that there is a continuum of regions in the interval $[0, 1]$, each region being uniquely identified by its net gain of privatization, Λ_i . The second assumption is that Λ_i has a distribution with density function $f(\cdot)$.

5.2.1 The Baseline Model

We begin by considering local governments' choices of the privatization ratio in each period. To do so, we need an explicit expression for the central government's punishment for ideological deviations. Here, we define the punishment as a quadratic function of the extent of deviation:

$$C_{it} = \frac{1}{2} \sigma (p_{it} - p_t)^2, \quad (5.1)$$

where σ is a positive coefficient. In period t , region i chooses p_{it} to maximize $y_{it} - C_{it}$. Since $y_{it} = S_i + p_{it}\Lambda_i$, the maximization problem can be written as:

$$\text{Max}_{p_{it}} S_i + p_{it}\Lambda_i - \frac{1}{2}\sigma(p_{it} - p_t)^2. \quad (5.2)$$

This leads to the following first-order conditions for the solution of p_{it}

$$\begin{cases} R_i - S_i - \sigma(p_{it} - P_t) \leq 0 \\ p_{it}[R_i - S_i - \sigma(p_{it} - P_t)] = 0 \end{cases} \quad \text{or} \quad \begin{cases} R_i - S_i - \sigma(p_{it} - P_t) \geq 0 \\ (1 - p_{it})[R_i - S_i - \sigma(p_{it} - P_t)] = 0, \end{cases} \quad (5.3)$$

which imply

$$\text{if } \frac{\Lambda_i}{\sigma} + p_t < 0, \quad p_{it} = 0; \quad (5.4a)$$

$$\text{if } 0 \leq \frac{\Lambda_i}{\sigma} + p_t \leq 1, \quad p_{it} = \frac{\Lambda_i}{\sigma} + p_t; \quad \text{and} \quad (5.4b)$$

$$\text{if } \frac{\Lambda_i}{\sigma} + p_t > 1, \quad p_{it} = 1. \quad (5.4c)$$

These three conditions define the three groups of regions at any period t . The net gains from privatization for the regions in the first group, defined by the condition in (5.4a), are smaller than $-\sigma p_t$; hence, they will not privatize any SOEs in period t . However, as p_t increases, some of them will begin to privatize. However, a special case of this group is when the net loss of privatization is larger than σ . In this case, a region will retain

full state ownership even if the central government increases its ideological position to full privatization. The second group, defined by the condition in (5.4b), comprises regions that maintain partial privatization. Region i 's choice of privatization is $\frac{\Lambda_i}{\sigma}$, which deviates from the central government's ideological position. The privatization of a region with positive gains from privatization; that is, when Λ_i is positive, is always ahead of the central government's ideological position; in the case of a region with negative gains; that is, when Λ_i is negative, the privatization always lags behind the central government's ideological position. The third group, defined by the condition in (5.4c), comprises regions whose net gains from privatization are larger than σp_t , so they will privatize all their SOEs. A special case is when the net gain is larger than σ . In this case, a region will privatize all its SOEs even if the central government holds an ideology that does not allow for any privatization.

Next, we define the central government's rule of updating its ideology. In the last section, we define the rule as being linked with the correlation between the change in privatization and the change in regional GDP. Now, we will formalize this definition. In effect, the central government determines the sign of

$$\Delta Y_t = \int \Delta p_{it} \Delta y_{it} di. \quad (5.5)$$

If ΔY_t is positive, the central government randomly selects a point in the interval $(p_t, 1]$ for its new ideology; if ΔY_t is negative, the central government randomly selects a point in the interval $[0, p_t)$ for its new ideology; and if ΔY_t is zero, the central government retains its ideology at p_t .

Replacing y_{it} by $S_i + p_{it}\Lambda_i$ in (5.5), we get

$$\Delta Y_t = \int (\Delta p_{it})^2 \Lambda_i di. \quad (5.6)$$

Note that Δp_{it} equals to zero for regions that do not experiment with privatization (that is, they do not increase or decrease the share of privatized SOEs). In addition, it is also zero if a region satisfies the condition in case (5.4a) or (5.4c). Therefore, we only need to consider case (5.4b) for regions that have experienced privatization in period t ; that is, regions in the set Ω_t . Plugging this case's solution for p_{it} into (5.6), we get

$$\Delta Y_t = (\Delta p_t)^2 \Lambda_t, \quad (5.7)$$

where $\Lambda_t = \int_{i \in \Omega_t} \Lambda_i di$ is the sum of the net gains of regions that have experimented with privatization in period t . The dependency of ΔY_t on the sum of net gains of regions in

the experiment set provides us an easy way to determine the long-run equilibrium. An equilibrium is a state wherein the central government does not change its ideological position. If the central government does not change its ideological position, the regional governments will not change their privatization mixes. Therefore, an equilibrium is fully defined by the following condition:

$$\Lambda_t = 0. \quad (5.8)$$

The set Ω_t comprises regions with $\Lambda_i \in [-\sigma p_t, \sigma(1 - p_t)]$. These regions can be further divided into two groups—one with positive Λ_i 's in the interval $[0, \sigma(1 - p_t)]$ and the other with negative Λ_i 's in the interval $[-\sigma p_t, 0]$. To be precise, we have

$$\Lambda_t = \int_{-\sigma p_t}^{\sigma(1-p_t)} \Lambda_i di. \quad (5.9)$$

It is evident that Λ_t is a monotonic decreasing function of p_t . In addition, Λ_t is positive when p_t is equal to zero and negative when p_t is equal to 1. Therefore, there is a unique solution to $p_t \in (0, 1)$ for equation (5.8). Thus, we have the following proposition:

Proposition 1. *There exists a unique equilibrium of partial privatization.*

In this equilibrium, the central government's ideological position is between full state ownership and full privatization, and there are regions that privatize some of their SOEs. There could also be regions without any privatization (regions with very significant negative net gains from privatization) and regions with full privatization (regions with very significant positive net gains from privatization).

It is easy to show that this equilibrium is Lyapunov stable. To see this, note that the central government will increase p_t if Λ_t is positive, which will then drive down Λ_t ; on the other hand, the central government will reduce p_t if Λ_t is negative, which will then drive up Λ_t . The equilibrium is Lyapunov stable, but not asymptotically stable because the central government may over-adjust its ideology. For example, when Λ_t is negative, the central government may excessively reduce p_t so that Λ_t becomes positive. This stability result is summarized in the following proposition.

Proposition 2. *The equilibrium defined in Proposition 1 is Lyapunov stable.*

Propositions 1 and 2 show that pragmatic ideological shifts alone cannot guarantee convergence to full privatization. However, it should be noted that the economy in our model is unrealistically simple. In particular, there are no economic interactions among regions. In the real world, such interactions do exist and some of them, as we showed in the last section, create positive spillovers where privatization is concerned. Next, we will consider one case of such positive spillovers caused by employment complementarities among regions.

5.2.2 Positive Real-economy Spillovers

In order to consider regional employment complementarities, we need to explicitly introduce labor hiring. For this, we assume that each firm uses only labor to produce a homogenous product. An SOE starts with hiring L_0 workers regardless of the region it belongs to. Its output is also a constant, say g_0 , across regions. Therefore, the profit of each SOE is a constant S_0 . There exists disguised unemployment in an SOE. The total payroll is a constant and each worker gets an equal share of it; that is, the wage rate is the total payroll divided by the number of workers. An SOE cannot lay off workers, but workers can choose to leave. The wage rate increases as more workers choose to leave voluntarily. The SOEs may offer some non-market or non-financial benefits to the workers. For example, they may have better job security than private firms, and workers may have developed some personal ties among each other, which are useful to them outside the factory. That is, the reservation wages of the workers are higher than their wages in the SOEs. In addition, their reservation wages increase as more workers choose to leave voluntarily. Therefore, the number of workers choosing to leave, say L_R , is an increasing function of the outside market wage offered in each period, w_t , which we will determine soon.

After privatization, the efficiency of each firm increases but varies among regions. For region i , a representative privatized firm's production function becomes

$$g_{it} = \alpha_i g(L_{it}) > g_0, \quad (5.10)$$

where α_i is region i 's coefficient of efficiency, and L_{it} is the number of workers hired in period t . Now, the firm can decide how many workers to hire. L_{it} can be either larger or smaller than L_0 , depending on the ongoing wage rate w_t and the efficiency parameter α_i . We assume that the α_i s of all regions are distributed with a density function $\varphi(\cdot)$ in the interval (α_0, α_m) .

The profit of a privatized firm in region i in period t is

$$R_{it} = \alpha_i g(L_{it}) - w_t L_{it}. \quad (5.11)$$

Firms are myopic in the sense that each of them chooses L_{it} to maximize its one-period profit R_{it} . This assumption is consistent with the central government's randomness in choosing its ideology. Since future states are predictable, firms have to behave in a myopic manner. It is then easy to show that L_{it} is increasing in α_i and decreasing in w_t .

After privatization, a firm lays off all the redundant workers given by $L_0 - L_{it} - L_R(w_t)$. However, the local government has to spend W_0 on average to compensate and retrain the

laid-off workers. Local governments have to obtain finance on their own. In reality, the central government provides some subsidies for worker reemployment; however, provinces are mostly on their own with regard to raising sufficient money. The net gain from privatization, Λ_p , now varies according to the period; hence, we replace it by Λ_{it} , which is

$$\Lambda_{it} = \alpha_i g[L_{it}(\alpha_p, w_t)] - w_t L_{it}(\alpha_p, w_t) - [L_0 - L_{it}(\alpha_p, w_t) - L_R(w_t)] W_0 - \alpha_0 L_0(\alpha_0, w_0). \quad (5.12)$$

It is easy to show that Λ_{it} is a monotonically increasing function of α_i . The case of w_t is a bit complicated. The derivative of Λ_{it} with respect to w_t is

$$\frac{\partial \Lambda_{it}}{\partial w_t} = -L_{it} + \left(\frac{\partial L_{it}}{\partial w_t} + \frac{\partial L_R}{\partial w_t} \right) W_0.$$

Because L_{it} decreases in w_t and L_R increases in w_t , it is not straightforward to sign the change of Λ_{it} when w_t increases. However, both L_{it} and $\frac{\partial L_{it}}{\partial w_t}$ are larger when w_t is smaller, although $\frac{\partial L_R}{\partial w_t}$ is more likely to be small when w_t is small but becomes larger when w_t increases. For example, when workers' reservation wages are distributed in a compact interval, $\frac{\partial L_R}{\partial w_t}$ is smaller for w_t s smaller than a critical value, and becomes very large after that value. Therefore, it is safe for us to assume that there exists a critical market wage rate, say w^* , before which Λ_{it} decreases in w_t and after which Λ_{it} increases in w_t .

Regional governments' decision of p_{it} is still governed by (5.4a-c), although now, Λ_i should be replaced by Λ_{it} . The two threshold values for Λ_i in (5.4), which are $-\sigma p_t$ and $\sigma(1 - p_t)$, can be transferred to the two threshold values for α_i , which are

$$\alpha_1 = \alpha(-\sigma p_t, w_t) \text{ and } \alpha_2 = \alpha(\sigma(1-p_t), w_t).$$

It is easy to show that both the values are increasing functions of their first arguments. The case of w_t depends on whether w_t is smaller or larger than w^* . When it is smaller than w^* , α_1 and α_2 increase in w_t ; when it is larger than w^* , α_1 and α_2 decrease in w_t .

For a given central government's ideological position p_t , the key variable that we need to determine now is w_t . In order to do that, we need to derive the supply and demand for labor in each period. Since the SOE workers are paid by a fixed wage, we only need to consider the *market* demand and supply of labor to determine w_t . The demand is contributed

by two types of privatized firms. One includes firms of regions that have reached full privatization in which case, each firm has a demand of L_{it} . The mass of all the firms in a region is 1, which means that the total labor demand of a region of full privatization is also L_{it} . The other type includes privatized firms in regions with partial privatization.

The total demand for labor in one of those regions is $p_{it}L_{it}$. By using the result $p_{it} = \frac{\Lambda_{it}}{\sigma} + p_t$ for partial privatizing regions, we get the total demand for labor as

$$L_D = \int_{\alpha_1}^{\alpha_2} \left(\frac{\Lambda_{it}}{\sigma} + p_t \right) L_{it}(\alpha_i, w_t) \varphi(\alpha_i) d\alpha_i + \int_{\alpha_2}^{\alpha_m} L_{it}(\alpha_i, w_t) \varphi(\alpha_i) d\alpha_i. \quad (5.13)$$

In the case of $w_t \leq w^*$, it is evident that L_D decreases in w_t for a given p_t . For $w_t > w^*$, things are more complicated because now Λ_{it} increases and α_2 decreases in w_t , and both the cases contribute to increases in L_D . However, they only influence labor demand at the margin. Increases in Λ_{it} increase the ratio of SOEs to partial privatization, and decreases in α_2 increase the ratio of SOEs to full privatization. The wage rate's effect on L_{it} is likely to still dominate. As a result, we impose the regularity assumption that labor demand be a decreasing function of the wage rate w_t . In comparison, it is straightforward to show that L_D increases in p_t for given w_t , and the derivative is

$$\begin{aligned} \frac{\partial L_D}{\partial p_t} &= \int_{\alpha_1}^{\alpha_2} L_{it}(\alpha_i, w_t) d\alpha_i + \sigma L_{it}(\alpha_1, w_t) \left[\frac{\Lambda_{it}(\alpha_1)}{\sigma} + p_t \right] \\ &\quad + \sigma L_{it}(\alpha_2, w_t) \left[1 - \frac{\Lambda_{it}(\alpha_2)}{\sigma} - p_t \right]. \end{aligned} \quad (5.14)$$

The supply of labor comprises four parts. The first part consists of the redundant workers released from the SOEs in regions without any privatization. In each region, the number of workers going to the market is $L_R(w_t)$. The second part consists of the redundant workers released from non-privatized SOEs in regions with partial privatization. In each region, the number of workers is $(1 - p_{it}) L_R(w_t)$. The third part includes workers released by privatized SOEs in regions with partial privatization. Their number is $p_{it}L_0$ in each region. The fourth part includes workers released by firms in regions with full privatization. Their number is L_0 in each region. Therefore, the total supply of labor is

$$\begin{aligned} L_S &= \int_{\alpha_0}^{\alpha_1} L_R(w_t) \varphi(\alpha_i) d\alpha_i + \int_{\alpha_1}^{\alpha_2} \left(1 - \frac{\Lambda_{it}}{\sigma} - p_t \right) L_R(w_t) \varphi(\alpha_i) d\alpha_i \\ &\quad + \int_{\alpha_2}^{\alpha_2} \left(\frac{\Lambda_{it}}{\sigma} + p_t \right) L_0 \varphi(\alpha_i) d\alpha_i + \int_{\alpha_2}^{\alpha_m} L_0 \varphi(\alpha_i) d\alpha_i. \end{aligned} \quad (5.15)$$

Similar to the case of labor demand, showing that L_s increases in w_t for a given p_t is not straightforward. However, for the same reason that we cited for labor demand, we maintain the regularity condition that labor supply increases in w_t . Also, as in the case of labor demand, it is straightforward to show that for a given w_t , L_s increases in p_t , and the derivative is

$$\begin{aligned} \frac{\partial L_s}{\partial p_t} = & \int_{\alpha_1}^{\alpha_2} (L_0 - L_R) d\alpha_i + \sigma(L_0 - L_R) \left[\frac{\Lambda_{it}(\alpha_1)}{\sigma} + p_t \right] \\ & + \sigma(L_0 - L_R) \left[1 - \frac{\Lambda_{it}(\alpha_2)}{\sigma} - p_t \right]. \end{aligned} \quad (5.16)$$

The market clearing condition for the labor market

$$L_D = L_S$$

then identifies a unique solution to w_t as a function of p_t . Using the implicit theorem, we know that the manner in which w_t changes with p_t depends on the sizes of $\frac{\partial L_D}{\partial p_t}$ and $\frac{\partial L_S}{\partial p_t}$.

From (5.14) and (5.16), we further know that this depends on whether L_{it} is larger or smaller than $L_0 - L_R$ for $\alpha \in [\alpha_1, \alpha_2]$. If the former is larger than the latter, then w_t increases in p_t ; otherwise, w_t decreases in p_t . In fact, $L_{it} \geq L_0 - L_R$ implies that privatized firms will hire all the remaining workers in those firms after some of the workers have chosen to voluntarily leave. In other words, these firms have an excess demand for workers. This is the essence of the positive spillover effect of privatization: Privatized firms will hire more workers than those staying with them; so they hike up the wage rate, which in turn attracts more redundant workers from other SOEs to enter the labor market and thus reduces the privatization costs of those SOEs.

Given that there exist such employment spillovers, the wage rate increases when the central government adjusts its ideology upward. Since it exhibits a U curve when the wage rate increases, Λ_{it} will also exhibit a U curve when the central government adjusts its ideology upward. With this result, we can bring all the pieces together to describe the dynamic process. Experiments of privatization start with regions that have positive net gains from privatization, Λ_{i0} ; that is, they are positive even when L_R is zero. The central government then moves its ideological position p_t toward more privatization. This has the effect of raising the market wage rate w_t . The net gain of privatization decreases for all regions. Now, the number of regions whose net gains from privatization remain positive becomes critical. If this number decreases rapidly such that the experimental

set Ω_t begins to be dominated by regions with negative net gains—that is, the sum of net gains in the set, Λ_t , becomes negative before the wage rate reaches w^* —then privatization will retreat to a partial privatization equilibrium at a wage rate smaller than w^* . In contrast, if the number of regions continuing to hold positive net gains does not decrease rapidly such that by the time the wage rate reaches w^* , the set Ω_t is still dominated by such regions—that is, Λ_t is positive throughout, then there will be an increasing number of regions that begin to have positive net gains. This is because of the positive spillovers brought by higher market wages, and the system will finally converge to full privatization.

The above discussion is more formally shown in Figure 5.3. As in Figure 5.2, the horizontal axis represents the central government's ideological position in period t , and the vertical axis represents the sum of gains for Ω_t , Λ_t . The second case discussed above is simple; therefore, it is not depicted in the figure. The first case is more interesting. Here, we show Λ_t as a convex function of p_t , as would be implied by our previous discussions. There are then three equilibria, denoted by p_1 , p_2 , and p_3 . The first two equilibria are reached when Λ_t equals zero, and the third equilibrium is reached when the system hits the boundary of full privatization. Among those three equilibria, p_1 and p_3 are (locally) stable. Around p_1 , Λ_t is positive for p_t smaller than p_1 , so p_t increases; and Λ_t is negative for p_t larger than p_1 , so p_t decreases. Therefore, p_1 is a (locally) stable equilibrium. The reason that p_3 is locally stable is straightforward: Λ_t is positive for all p_t larger than p_2 . The equilibrium p_2 is not stable because Λ_t is negative for p_t smaller than p_2 and larger than p_2 , so p_t decreases; similarly, Λ_t is positive for p_t larger than p_2 , so p_t increases.

Figure 5.3 shows the importance of bolder ideological shifts in reaching full privatization. If ideological shifts are incremental, the system will stop at the stable

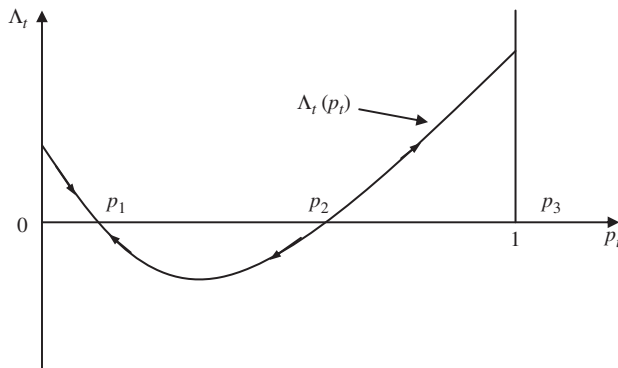


FIGURE 5.3 Multiple equilibria under positive real-economy spillovers

equilibrium of p_1 . However, if the central government makes a bold move to shift its ideological position from below p_1 to above p_2 , then full privatization can be reached.

On the basis of the case shown in Figure 5.3, we summarize the results of this subsection into the following proposition:

Proposition 3. *There exist stable equilibria of both partial privatization and full privatization when employment spillovers exist. If the central government makes incremental moves in its ideological shifts, the equilibrium of partial privatization is obtained. If the central government makes bold moves at some stage of the process, the equilibrium of full privatization is obtained.*

One final remark on the nature of the employment spillovers studied in our model—these spillovers are not directly passed from some regions to others. They are transmitted through the market mechanism—to be precise, through the dynamics of the wage rate. Therefore, they are not conventional externalities but pecuniary externalities. In a sense, our model resembles the big push model developed by Murphy, Shleifer, and Vishny (1989) who rely on demand spillovers to characterize a big push. These types of externalities are interesting because they are endogenously created by the model, while conventional externalities are usually taken as received assumptions for the model.

5.3 SOME DISCUSSIONS ON THE MODEL'S RELATIONSHIP WITH THE LITERATURE

Our formal model makes a contribution to the study of endogenous institutional change in addition to offering an explanation to China's gradual approach to reform. However, we need to clarify what "endogenous" means here. To economists, an endogenous variable is one that is determined by the system in concern. For example, in a classical general equilibrium model, everything—prices, wages, outputs, consumptions, demand, supply, and so on—is obtained from the model with the exception of utility and production functions, which are predetermined. In this case, we say that everything is endogenous except preferences and production technologies. Analogously, an endogenous institutional change must emerge from the system that the researcher is studying, but not from imposition by external forces. However, with regard to prediction, economists usually, or always have to, resort to the changes in parameters that are predetermined relative to the system being studied. For example, when North and Thomas (1973) study the evolution of land ownership in Western Europe, they use the changes in land-man ratio as the predictor—land became more privately owned when land-man ratio increased because the price of labor (or importance of people) relative to land increased. This is the standard approach in the so-called new institutional economics.

However, this approach is seriously challenged by Bromley (2006). According to him, it is as mechanical as trying to explain the movement of the front sprocket by the movement of the rear sprocket on a bicycle. It is true that by design, the rear sprocket drives the front sprocket; however, the energy that drives a bicycle does not come from the rear sprocket, but from the biker. The movement of the rear sprocket is the mechanical *cause* for the movement of the front sprocket, but the biker is the *reason* for the movement of the front sprocket and indeed, the *reason* for the movement of the entire bicycle. Trying to explain institutional change by economic factors such as relative prices is similar to using the movement of the rear sprocket to explain the movement of the front sprocket. It is equivalent to finding the mechanical *cause* for institutional change but not the *reason* for it. Following Commons, Bromley directs us to treat institution as a “collective action that restrains, liberates, and expands individual action,” and

[I]f we are to understand reasons for such collective action, we must abandon deterministic mechanical formulations that see public officials as perverse utility maximizers. We must also formulate a more honest heuristic of the process whereby individuals create, as they engage in collective action, plausible imaginings of future outcomes, and plausible imaginings of pathways whereby those outcomes might be brought to fruition. (Bromley 2006, 84)

To a large extent, Bromley is correct and our model in a way has followed his suggestion to bring one kind of individual imaginings—ideology—into serious modeling endeavors. However, Bromley appears to have over-emphasized the role played by individual intentions and made the structural analysis of institutional change difficult. Human intentions, as we argued in the last section, are indeed very important in making institutional changes. However, we economists need a handler that allows us to conduct a structured analysis; that is, concepts and analytical tools that allow us to analyze the mechanism of institutional change and make at least indicative predictions. Indeed, the lack of structured analysis is why the old institutional economics, to which Bromley is one of the significant contemporary contributors, has failed to create structural models of institutions and institutional change. The new institutionalists may sound naïve when they make predictions; however, their use of standard economic analytical tools makes their theories tractable and provides a base for further improvements.

A more balanced view is provided by Avner Greif in his book *Institutions and the Path to the Modern Economy* (2006). Chapter 6 of the book is devoted to discussions on endogenous institutional change revolving around the concept of *quasi-parameters*. A conventional game theoretical model often studies one transaction or one institution and often defines an institution as the set of equilibrium strategies. Parameters are outside the transaction being studied; they are predetermined to the model. This often leads to “too much stability” in the sense that an institution is predetermined by the

parameters. Another drawback of the game-theoretical approach is that, in most cases, it can only explain the *self-enforcement* of an institution under a predetermined set of parameters, but not its dynamics; that is, its *self-reinforcement* or *self-destruction* in the long run. On the other hand, historical analyses offered by political scientists and historians imply “too much fluctuation”; this means that institutions are extremely variable to the changes in many factors. Greif tries to build a theory of endogenous institutional change by using quasi-parameters to account for both institutional self-enforcement in the short run and self-reinforcement or self-destruction in the long run. He writes:

In contrast [to the above two approaches], this chapter asserts that it is conceptually sound and analytically tractable to consider some aspects of a situation as parametric when studying self-enforceability but as variables subject to change when studying institutional dynamics. It is appropriate to inquire whether the institution, analyzed as a game-theoretic equilibrium, endogenously affects aspects of the situation apart from behavior in the transaction under consideration. The argument advanced here is that some such aspects should be considered as parametric in studying self-enforceability in the short run but as endogenously determined—and thus variable—in the long run. Parameters that are endogenously changed in this manner and with this effect are referred to here as quasi-parameters. (Greif 2006, 160)

In game-theory language, quasi-parameters are fixed by the stage game, but are altered by those games over time. When these parameters are fixed, standard game theory can be applied to explain self-enforceability, or in more conventional game-theoretic language, how equilibrium or equilibria are created and sustained in the stage game. When these parameters change over time, the stage equilibrium or equilibria may be reinforced or destructed. The key point of Greif’s departure from the conventional game theory approach is to assume that quasi-parameters are affected by the existing institutions and will reinforce or destruct them in the long run. To him:

Focusing on regularities of behavior in a particular transaction for a given set of parameters diverts attention from other possible ramifications of an institution that go beyond this behavior. Institutions influence factors—such as wealth, identity, ability, knowledge, beliefs, residential distribution, and occupational specialization—that are usually assumed as parametric in the rules of the game. Although it may not be possible to prove that institutions generally have such ramifications, it is difficult to think of any institution that in the long run does not have implications beyond the behavior in the transaction it governs. In the game-theoretic framework, such influence implies a dynamic adjustment of variables that, had this influence been ignored, would have been considered parameters in the stage game. (ibid., 164)

Greif then proceeds to compare the political-economic trajectories of two medieval Italian city States Venice and Genoa. Both city States were established as strong maritime powers in the medieval age. Their initial political arrangements also resembled each other.

Venice had an elected doge who was under the supervision of advisory councils; Genoa was directly ruled by elected consuls. However, Genoa's politics had been characterized by waves of turmoil, but Venice had maintained a relatively stable polity. Greif attributes Genoa's problem to its initial culture of clan fights for dominance and subsequent heterogeneous growth of wealth among clans. Here, wealth is taken as a quasi-parameter. In the short run, the distribution of wealth reached a balancing point at which clans did not engage in fights; that is, a short-run self-enforcing equilibrium (institution) was reached. However, as commerce expanded, some clans accumulated wealth faster than the others and thus began to challenge the short-run equilibrium making it unsustainable in the long run. Greif attributes the stability of Venice to the reinforcing belief held by the clans that they should unite to fight against any clans that reneged.

Although Greif's interpretation of the historic events may not be entirely convincing and even though his theory may be flawed (see a recent harsh critique by Clark 2007), his efforts at trying to explain both the stability and dynamics of institutions open up a new window for economists to move their models of institutional change closer to the reality. Greif's approach revolving around quasi-parameters is flexible enough for economists to account for the dynamics of institutional change; at the same time, it is also structured enough for economists to use the standard and newly developed game theory tools in their analysis. Our model is one attempt to seriously consider Greif's approach to analyze modern institutional change.

In our model, the central government's ideology is a quasi-parameter. In each period (the stage game), this ideology is fixed and parametric to regional governments. Given this ideology, regional governments' choices of the level of privatization are self-enforcing because these choices are the best responses of the regional governments. In other words, these choices constitute a dominant strategy equilibrium. However, they are not final because they lead to changes in the central government's ideology. Between periods, the central government's ideology becomes a variable that makes the system dynamic. Our story, however, is slightly more complex than Greif's notion of self-reinforcement or self-destruction. The complexity comes from the pecuniary externalities created by the early privatization of some regions through the labor market. We find that these externalities are negative when the central government's ideology is at a low position of privatization but becomes positive when it takes a high position of privatization. This creates the multiplicity of equilibria. This is where human intentionality comes to play a vital role. If the central government always adjusts its ideology in an incremental manner, the system gets trapped in an equilibrium of partial privatization; if instead, the central government takes a bold step in upgrading its ideology toward more privatization, the system converges to full privatization. Self-reinforcement only happens after the central government adjusts its ideology above a critical level of privatization.

Our model also provides a synthesis for North's idea of viewing ideology as a constraint and Bromley's idea of viewing ideology, or human intentionality, as a force for change. Ideology is a constraint for regional governments' choices of privatization. Indeed, the whole country would be trapped in a long-run equilibrium of partial privatization if the central government acted in a mechanically piecemeal way. The importance of human intentionality is shown by the role of a bold shift in ideology; that is, in taking the system to full privatization.

5.4 CONCLUDING REMARKS

This chapter develops a formal model of institutional change featuring bounded rationality, dynamic adjustments of ideology, and multiple equilibria of privatization. Although it is framed in the case of SOE privatization, the essence of the model is applicable to explaining other reforms in China. As we have reviewed in the previous chapter, the waves of ideological shifts have played a critical role in pushing forward China's market reforms. China has not been trapped by the pitfalls of partial reforms pointed out by Murphy, Shleifer, and Vishny (1992) mainly for two reasons. The first is that the Chinese government has been encompassing in the sense that it puts the society's overall well-being above the interests of various segments of society. The second is that the CCP is pragmatic about its ideology and dares to take bold steps in revising it.

A meticulous reader may inquire about the necessity of adding ideology to our model. Indeed, if the central government held an ideology of full privatization at the very beginning, the system would converge to full privatization overnight. However, we add ideology in our model not for the purpose of increased technicality, but because ideological shifts have been very important in China's reform process. Indeed, ideology or beliefs are important in determining the trajectories of institutional change anyway, as North and Greif's studies on the history have readily shown us. We believe that one of our contributions is that we have brought ideological changes into serious theoretical modeling. With the exception of Greif (2006), this kind of exercise is rare in economic literature.

CHAPTER
6

Institutional Complementarities and Gradual Reform

In the previous chapter, we built a theoretical model and studied how the interplay between the central government's ideology and local experiments shaped the trajectory of a reform and pushed it toward the market. In this chapter, we will discuss a complementary issue: The manner in which different reforms reinforce each other and converge toward the market. We will borrow Milgrom and Roberts' concept of strategic complementarities (Milgrom and Roberts 1990a; 1990b) to develop the idea of institutional complementarities and apply it to explain the process of economic reform in China. In particular, we will discuss how institutional complementarities have shaped the trajectory of reform and determined the efficiency of Chinese reform in Aoki's framework of comparative institutional analysis (Aoki 2000; 2001). Aoki's analysis provides the following propositions: First, the first-best institutional arrangements implied by the Walrasian general equilibrium do not exist in the real world. Second, there exist multiple equilibria for institutional arrangements, each of which is a response to the history, culture, and existing institutions in the society where this arrangement is situated. Third, different institutions may not be compared in terms of efficiency. Fourth, institutional diversity, either within a country or between countries, improves efficiency. Based on these propositions, we will attempt to answer the following questions in this chapter: What are the factors that have determined the trajectory of China's gradual reform? Why have reforms converged uniformly toward the market? How have those reforms improved efficiency?

In Section 6.1 below, we will first introduce Milgrom and Roberts' concept of strategic complementarities. In Section 6.2, we will discuss Aoki's approach of comparative institutional analysis. In particular, we will introduce his explanation to the institutional differences between Japan and the United States and discuss his four propositions. In

Section 6.3, we will give Aoki's static model a dynamic extension and apply it to explain the Chinese reform. We will conclude the chapter with Section 6.4.

6.1 STRATEGIC COMPLEMENTARITIES AND A FEW EXTENSIONS

Before discussing strategic complementarities in two-person or multi-person games, let us introduce the complementarities in production and consumption. With respect to consumption, complementarity means that consuming more of one product increases the marginal utility of the consumption of another product and vice versa. This implies that the consumptions of those two products should increase simultaneously. We can provide many examples from real life. For instance, people usually add sugar or milk to their coffee. If the amount of coffee is increased but the amount of sugar or milk is not increased, then the coffee tastes bitter. The same thing happens when one adds too much sugar or milk to a fixed amount of coffee. Coffee only tastes good if one increases the quantity of coffee and the quantity of sugar or milk simultaneously. Other examples include balance between salt in food, gas in cars, and software applications running on computers. In the case of production, complementarities mean that increasing one input increases the marginal product of another input and vice versa. This also implies that those two inputs should increase simultaneously. For instance, land and labor are complements in agricultural production; increasing only one input will meet the constraint of diminishing marginal return. This is how the Malthusian trap occurs: Under the constraint of limited land resources, the rate of population growth, which takes an exponential form, will ultimately surpass the rate of output growth, which takes the arithmetic form. Thus, it becomes necessary for the population to decrease by way of illnesses, wars, and other catastrophic events. Milgrom and Roberts (1990a) find that the unique feature of the modern manufacturing unit is flexible production; their explanation is that flexible production started with some new inventions, especially computer-aided design, and was enhanced by the adoption of complementary equipment whose costs are lowered by these inventions.

In another paper (Milgrom and Roberts 1990a), Milgrom and Roberts applied the concept of complementarities to game theory and studied the equilibria of supermodular games; that is, games with strategic complementarities. We skip the mathematical details of supermodular games and only provide a succinct introduction to their implications related to our discussions. In a multi-person game, suppose that the players' strategy space has only one dimension in which strategies can be well ordered. For example, in a Bertrand price game with heterogeneous but substituting products, the

strategy space of each firm is an interval of prices. This interval has an upper bound—if a firm sets a very high price, the demand for its product will be zero—and a lower bound, which is usually a firm's marginal cost of production. The strategy of a firm is one of the numerous prices in this interval. Obviously, these prices are real numbers and thus can be ordered. If the marginal utility of one player is increasing in the strategy of the other player, then the game is a supermodular game. In the above Bertrand price game, a firm exerts smaller competition pressures on other firms and allows them to raise their prices when it raises its own price. Therefore, this game is a supermodular game. Milgrom and Roberts prove a theorem for supermodular games—there exists a non-dominated interval for each player's strategies, and the upper and lower bounds of the intervals constitute a Nash equilibrium each. The significance of this theorem is that the range of equilibria is significantly reduced when there are multiple equilibria in a game.

Strategic complementarities and Milgrom and Roberts' theorem can be extended from single-dimensional games to multi-dimensional games. When the strategy spaces of players have more than one dimension, we can view the entire game as a super-game comprising several sub-games, each of which corresponds to one dimension in the players' strategy spaces. For example, two acquaintances are engaged in two transactions when they trade with each other—one is the trade of goods in the commercial domain, and the other is the personal interaction in the social domain. As we know from our day-to-day experiences, people bring in noncommercial considerations when they trade with acquaintances. As a result, the outcomes of commercial transactions may be altered. This conclusion can be applied to super-games; that is, an equilibrium of a sub-game is not necessarily a part of the equilibria of a super-game.

The conventional approach in institutional analysis defines the institution governing a transaction as the profile of equilibrium strategies for this transaction. However, the society is a connected whole, and the equilibrium of one transaction may not be part of the equilibrium of the super-game of the whole society. As Greif (2006) points out, one problem with the current literature on institutions is that most studies only examine the institutions governing one transaction, but pay little attention to the connections among multiple transactions. Strategic complementarities are one of the descriptions of those connections. However, a direct application of Milgrom and Roberts' theory is not sufficient to solve the problem facing us. According to their theory, transactions are predetermined and complementarities are assumed to exist; our problem involves the introduction of new transactions and we need to answer the following question: Given the existing transactions and the institutions governing these transactions, what types of institutions will emerge to govern the new transactions? To address this, it is necessary to extend the framework proposed by Milgrom and Roberts.

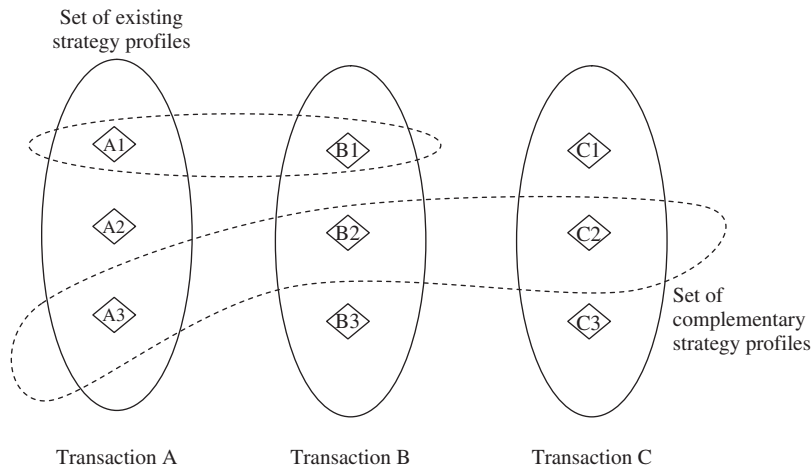


FIGURE 6.1 An extension of strategic complementarities

We illustrate our approach in Figure 6.1. In the figure, transactions A and B are the existing transactions, and every transaction has three potential strategy profiles—A1, A2, A3 and B1, B2, B3. Transaction C is a new transaction, and it also has three potential strategy profiles—C1, C2, C3. Our question is, which profile among C1, C2, and C3 will become the outcome for transaction C? The answer to this question depends on the existing set of strategy profiles for transactions A and B. In a general setting, suppose that there are n existing transactions and the initial set of equilibrium strategy profiles is $E_0 = \{E_{01}, E_{02}, \dots, E_{0n}\}$, where E_{0i} , $i = 1, 2, \dots, n$, is the strategy profile for transaction i . Denote the new transaction by $n + 1$. Then, if the adoption of a strategy profile $E_{1, n+1}$ for transaction $n + 1$ and thus a new set of strategy profiles $E_1 = \{E_{01}, E_{02}, \dots, E_{0n}, E_{1, n+1}\}$ for the $n + 1$ transactions as a whole, results in a Pareto improvement for players in terms of their sum of utility in the $n + 1$ transactions, we say that there exist strategic complementarities between $E_{1, n+1}$ and E_0 . Intuitively, or in the framework of evolutionary game theory that we will discuss shortly, one can easily understand that a new strategy profile is more likely to emerge as the institution governing the new transaction if it has strategic complementarities with the existing set of strategy profiles. In Figure 6.1, {A1, B1} is assumed to be the existing strategy profile. Then, the strategy profile among C1, C2, and C3 that is a strategic complement of {A1, B1}, C1, let's say, is more likely to emerge as the institution governing transaction C.

Note that thus far, we have not invoked the concept of equilibrium. The initial set of strategy profile does not need to be an equilibrium outcome of the super-game comprising transactions A and B. Translated into the institutional language, this means that it is not necessary that the existing institutions have to be equilibrium outcomes of a

sort created by the interaction among people, but can simply be imposed by social and political entities. In addition, the final outcome, such as $\{A1, B1, C1\}$ in Figure 6.1, does not need to be a Nash equilibrium of the super-game comprising all the sub-games, such as transactions A, B, and C in Figure 6.1. This is because the existing set of strategy profiles for transactions A and B is predetermined when a strategy profile is being chosen for transaction C. In other words, C1 is the best response to A1 and B1, but A1 and B1 may not be the best response to C1.

By viewing an institution for a transaction as a strategy profile for the game associated with that transaction, we can transform the complementarities between strategy profiles to institutional complementarities—an institution governing a new transaction is said to complement the set of institutions governing the existing transactions if adopting it leads to a Pareto improvement in the society. Note that institutional complementarities do not imply institutional optimality. The existing institutions are given, and complementarities run from the new institution toward the existing institutions.

However, in the long run, the society has scope to improve if adjustments can be made to the existing institutions. Let us continue to refer to Figure 6.1 but revert to the language of institutional literature. Suppose that the society has chosen C1. Because A1 and B1 may not be the best responses to C1, the society has incentives to change the institutions governing transactions A and B until they become the best responses to C1. This may cause a new round of search for an institution governing transaction C that is the best response to the new institutions for transactions A and B, and so on. The process will converge to a state where no further Pareto improvements can be made to a change in one transaction given the institutions governing the other two transactions. This state must belong to a non-dominated set of combinations of strategy profiles equivalent to Milgrom and Roberts' non-dominated interval. In Figure 6.1, this set is denoted as the set of complementary strategy profiles, which hypothetically comprises A3, B2, and C2. Using the institutional language, we call this set the “set of institutional complementarities.”

The above path of adjustment matches China's gradual approach to economic reform. The surviving reform in one area is the one that creates an institution that is complementary to the existing institutions in other areas; nevertheless, the introduction of this new institution leads to institutional improvements in other areas. However, this gradual process of adjustments may not invariably end up converging to the set of institutional complementarities because of the frictions existing in reality. For example, strong interest groups who are against further reforms may emerge in the process of partial reforms because these groups gain from mid-way institutions. The critical factor is whether partial reforms can also create strong groups whose interests hinge on continuous institutional improvements. As we will see in Section 6.3, China's gradual reforms have succeeded precisely because they have created this type of groups.

6.2 INSTITUTIONAL DIVERSITY AND ITS EFFICIENCY

Institutional improvements do not imply that there exist a set of institutions that are universally optimal. Each country has its unique history and cultural heritage that restrict the choice of institutions due to institutional complementarities. Institutional diversity then is inevitable. Masahiko Aoki, a colleague of Milgrom in the economics department at Stanford University, was the first person to introduce the concept of institutional complementarities into institutional analysis in order to study institutional diversity. Together with his colleagues, Aoki started the project of comparative institutional analysis. He set the premise of this approach on the acknowledgement of agents' bounded rationality, the information asymmetry among them, and market imperfections. Due to this, there are no economic institutions whose values are universal across time and space; diverse institutions are the rule, not exceptions. Institutional diversity should be considered as a premise, if not a prime topic, in any efforts of institutional analysis. This emphasis on institutional diversity makes a tangible contribution to institutional analysis. For mainstream economists and even some new institutional economists, an implicit assumption is that there exists a set of ideal—albeit abstract—economic institutions under which the economy reaches optimal efficiency. All the other institutions should be compared with this set of institutions to make improvements. Aoki reminds us that this set of ideal institutions does not exist in reality; instead, diverse institutions, because they build on a society's history, culture, and existing institutional arrangements, are not only the rule but can also achieve higher levels of efficiency. These are not the optimal levels, but are acceptable; most importantly, given the existing historical and institutional circumstances, diverse institutions can approach Pareto arrangements; that is, arrangements under which no further improvements can be made by changing them.

However, there are omissions in the causes Aoki proposes for institutional diversity. The most important omission is the limitation of human knowledge. Even if human beings are fully rational, their knowledge may be limited by the times they live in. The speed and thus, the stock of knowledge accumulated can be vastly different for people living in different natural environments and historical periods. To a large extent, institutions reflect the stock of knowledge that human beings have accumulated about their natural environment and the society they live in. It is thus not surprising that we find diverse institutions in the world. One related issue is that the causes proposed by Aoki are very abstract, failing to acknowledge the roles of history, culture, and past institutions in determining the current institutions. Every society has its own history; we cannot return to the original state to discuss its existing institutions, and comparative institutional analysis has to be carried out in a certain historic context. This is indeed

what Aoki has done, as reflected by the following model that he uses to explain the differences between the United States and Japan.

Born in 1938, Aoki witnessed the rise of Japan during the postwar period and its relative stagnation in the 1990s. He is concerned about the role played by economic institutions in Japan's rise and its relative stagnation. In addition, as a scholar teaching and conducting research in both Japan and the United States, it is natural for him to make a comparison between the Japanese and American systems. The key difference between the Japanese and American economic systems is that the former emphasizes team cooperation and corollary arrangements such as lifetime employment, whereas the latter emphasizes individual competence and corollary arrangements such as flexible employment. Aoki wants to provide an explanation for this contrast by using an evolutionary game theoretic model and comparing the two systems with a Pareto system; that is, a system to which no further improvements can be made.

Before discussing Aoki's model, it would be helpful to introduce the basic concepts of evolutionary game theory. Evolutionary games found their way from theoretical biology to game theory. Their original purpose is to study which stable survival strategies an animal species would adopt. For example, some species are mild, but others have an inherent tendency to fight and compete. In evolutionary biological theory, animals from a species are randomly paired and their strategies are studied. Each pair of strategies brings a gain or loss to the paired animals. Then, the animal with a higher gain is assigned a higher birth rate, a reflection of Darwin's theory of evolution. The game continues for a few generations. The strategies that yield consistently low gains will be eventually weeded out by this process because the number of animals adopting them gradually diminishes. After a sufficiently large number of iterations, the strategy adopted by the largest number of animals results in an evolutionary equilibrium. Furthermore, it is an evolutionarily stable equilibrium and becomes the species' survival strategy if it withstands the invasions by small numbers of mutants.

There are two main purposes for introducing the concept of evolution to game theory. One purpose is to pave the way for game theory to introduce bounded rationality. In biological models, animals do not possess rationality and they adopt a strategy only in a passive manner depending on whether that strategy could lead to a higher birth rate. This provides one way for game theory to introduce bounded rationality. In addition, it provides an approach for studying institutions—a human design that is highly correlated with time. As pointed out in the introductory chapter of this book, we can provide a positive explanation for institutional change only if we introduce bounded rationality into our models. Evolutionary game theory provides us with an analytical tool. The second purpose is to solve the multiple equilibria problem in static games.

There often exist multiple equilibria in a static game (such as the coordination game that we will discuss shortly); that is, there are several stable outcomes in a game. If we do not have more information or impose conditions, we would not know which outcome would actually appear. It is possible to use the biological selection process to weed out some of the equilibria so that we get a more precise prediction for the possible outcome. This is helpful for institutional analysis because it may provide us with more accurate information about the path of institutional change and its final outcome.

Given this background, we can now discuss Aoki's model. The model begins with the assumption that there are two industries—V and M—in an economy. Industry V is characterized by not only a high demand for cooperation among work units but also a high degree of uncertainty; industry M is characterized by competition for resources among work units and thus, a low demand for cooperation and a low degree of uncertainty. Hence, it is optimal for industry V to adopt the assimilated information structure to communicate among work units because this information structure helps coordination and lowers the degree of uncertainty; for the opposite reason, it is optimal for industry M to adopt the differentiated information structure for communication. Lastly, the consumptions of the products of these two industries are complementary; that is, the greater the consumption of one product, the higher the demand for the other product.

In both the industries, production is undertaken by two individuals. A society comprises many people, and each person can learn one of the two types of skills—flexible skills or functional skills. Flexible skills are highly dependent on the context the owner of the skill operates within; therefore, it is comparable with the assimilated information structure. Functional skills are independent of the context and are thus suitable for the differentiated information structure. In every stage game, each person chooses an industry type to enter into and then is randomly matched with another person within the same industry to carry out production. If both persons have flexible skills, the assimilated information structure is adopted; if they both have functional skills, the differentiated information structure is adopted; if they have different types of skills, there is no definite information structure. Figure 6.2 shows the unit costs (that is, the costs of producing one unit of product) of different scenarios of matches in the two industries.

Within each industry, the matches between players constitute a coordination game; production costs are lower when the two players have the same type of skills. For example, in industry V, the cost is 10 units when both the players have flexible skills, 30 units when both the players have functional skills, but 50 units when they have different types of skills. This is mainly because having the same type of skills helps the two players to adopt the same information structure so communication becomes easier.

	Flexible skills	Functional skills	Flexible skills	Functional skills
Flexible skills	10	50	30	45
Functional skills	50	30	45	10
	Industry V		Industry M	

FIGURE 6.2 Production costs of two industries and different matching conditions

Source: Aoki 2000, 47, Figure 3.

However, the two industries favor different types of skills. In industry V, the cost is lower when both the players have flexible skills than when both the players have functional skills, whereas it is the reverse in industry M. Nevertheless, the two matches with both the players having the same type of skills are both equilibria in each industry. We do not know which of them will, in fact, be adopted unless we impose extra conditions (e.g., the final outcome should arrive at the lowest cost). This is a problem faced with multiple equilibria.

If we examine each industry separately, we cannot exclude any equilibrium even in the framework of evolutionary games because evolutionary game theory has proved that the equilibria of the stage game are also the evolutionary stable equilibria in the dynamic game. Aoki uses the risk dominance condition to eliminate the equilibrium with higher costs. Risk dominance means that the equilibrium bringing higher aggregate payoffs should be chosen when both the equilibria have the same probability of being adopted. Thus, the equilibrium in which both the players have functional skills is eliminated in industry V and the equilibrium in which both the players have flexible skills is eliminated in industry M. If the story ends here, then Aoki's institutional diversity emerges in which all the workers in industry V have flexible skills and use the assimilated information structure to communicate, whereas all the workers in industry M have functional skills and use the differentiated information structure to communicate. In the meantime, efficiency has reached the Pareto optimum. Aoki thus concludes that institutional diversity is conducive for optimal efficiency and calls this mixed institutional arrangement "Pareto equilibrium."

However, inferior institutional arrangements will emerge when we consider the two industries together. Here, the key is that the product consumptions of the two industries are complementary to each other. Suppose that a majority of the workers have functional skills at the beginning of the game. Then, the probability of a worker meeting another worker with functional skills is higher than that of meeting a worker with

flexible skills. Industry M rewards matches in which both the workers have functional skills; hence, most workers will choose to enter industry M. As a result, the output of industry V falls. Yet, the demand for its product increases because the output of industry M increases (consumption complementarities). A natural result is that the cost of industry V's product increases. This induces some of the workers with functional skills to migrate to industry V. These workers do not need to change their skill types because having the functional skills minimizes the risk of mismatch of skills. The final outcome is that most workers have functional skills and the differentiated information structure is adopted. Aoki calls it the "A-type equilibrium." In contrast, if the society starts with a majority of workers having flexible skills, the final outcome is that most workers have flexible skills and the information structure is assimilated. Aoki calls it the "J-type equilibrium." Neither outcome has the optimal institutional arrangements as compared with the mixed institutions in the Pareto equilibrium.

As is very clear, the A-type equilibrium is the institutional arrangements existing in the United States, and the J-type equilibrium is the institutional arrangements existing in Japan. It is easy to decipher from Aoki's model that the American system is related to the initial dominance of individualism in the United States, and the Japanese system is related to the initial dominance of team spirit in Japan. Complementarities mean that each person would adopt a strategy—either developing functional skills or developing flexible skills—consistent with the prevailing strategy; that is, the initial institution, in the society.

Aoki's model provides us with insights regarding institutional diversity. It shows that what we find in reality is more likely to be the second-best arrangement instead of Pareto institutions implied by the general equilibrium. The emergence of these second-best arrangements is a result of institutional complementarities. There are multiple equilibria in which new institutions could take shape; it depends on the history, culture, and existing institutions to pin down which equilibrium would emerge as the final result. The accumulative effects inherent in this process lead to institutional conformity. However, one of the important insights Aoki gives us is that institutional diversity, both within a country and in the world, improves economic efficiency. Indeed, in his model, Pareto efficiency can only be obtained under diverse institutions. This is mainly because different sectors within a country (like in Aoki's model) and different countries in the world have different predetermined characteristics that oblige different institutions to complement. To use a Chinese proverb, this is *yindi zhiyi*; in other words, to suit the methods to the local conditions. Although this seems to be an obvious conclusion, some self-assertive mainstream economists differ in their opinion. They believe in the existence of a set of universal institutions to which any deviation would bring efficiency losses. However, reality has always proven them wrong as in the case of the big bang

approach to transition in Eastern European and former Soviet Union countries. Aoki's model provides a theoretical rebuttal to these economists.

Further extrapolation from Aoki's model helps us to reach the following proposition: institutions in different countries may not be comparable with each other in terms of efficiency. In this model, A-type and J-type equilibria have the same aggregate costs (that is, 40) of producing one unit of product V and one unit of product M. However, this stems from Aoki's assumption. In reality, different levels of aggregate costs are quite possible depending on the ratio of mismatches between skills and industries in the society. However, we cannot comment on the superiority of the A-type and J-type systems without considering the cultural contexts that they would operate in. Since the A-type system would naturally evolve from an individualistic culture and the J-type system, from a cooperative culture, we have to conclude that both the systems would reach the optimal levels of efficiency under the constraint of the existing cultures. This, of course, assumes that evolution occurs without any impediments. History has shown us that inefficient institutions do persist. However, this occurs mostly because of a lack of knowledge. In ancient times, human beings made their decisions based more on prejudices and superstitions than on rationality. Even in modern times, many fallible institutions were introduced and tested because of the imperfect understanding of society and the way it should be organized. The socialist experiment in the twentieth century is one example. In the last several hundred years, human knowledge—including the knowledge about institutions—has grown at an explosive rate. Owing to the rapid accumulation of knowledge, including knowledge built upon the mistakes of humans, we now have a fairly clear understanding of what type of institutions work and what do not. The constraints of knowledge on institutional progress have been considerably reduced, if not completely removed. It is now up to the stakeholders to decide the trajectory of institutional change within a country. Thus, a comparison should be made between the emerging new institutions and the existing old institutions. Taking the slow parameters such as culture as given, it is possible to know which institutions are better than the others. This kind of comparison serves as a force moving institutional change forward in a country.

The above insights have strong implications when we analyze the logic and efficiency of China's gradual reform. There have been many mid-way institutions in China's reform process. They do not meet the standards of purity and are not even clearly defined in order to complement the existing institutions; however, they share a common direction toward the market and thus move the country forward. In the next section, we will provide a critical narrative of China's reform process emphasizing the role of institutional complementarities in bringing about convergence to the market by guiding reforms in different arenas.

6.3 INSTITUTIONAL COMPLEMENTARITIES AND CHINA'S GRADUAL REFORM

China adopted a gradual path to economic reform for both historical and practical reasons. We will discuss those reasons in detail when we study the dual-track price system—a classical example of gradual reform—in Chapter 9. The main aim of this chapter is to provide an explanation of how reforms in different areas converge to the market. Before we start our discussion, let us clarify one point: Reform was already set in motion at the very beginning of economic reform. There was a loud hue and cry, not consensus, that the planned economy had serious flaws and reform was imperative. Fan Gang insists that economic transition is different from other institutional changes in that its aim is clearly set; that is, to move from the planned economy to the market economy (Fan 2008). However, this was not very clear in the early stage of transition; it was not until 1993 when the Third Plenary of the Fourteenth Party Congress was held that the goal of the socialist market economy was set. However, the reform being set into motion brought about acknowledgment of the drawbacks of the planned economy and the necessity for reform. Thus, as we intend to show in this section, converging forces toward the market would be created once the reform on planning was initiated. This was one of the magical aspects of the gradual Chinese reform—it did not give a clear picture about how the economic system should be in China, and the reform path was full of uncertainties; however, reforms in different areas converged uniformly toward the market. The complementarities of market institutions played a critical role here.

China's gradualism has both a spatial and a temporal dimension. With regard to the spatial dimension, reforms are often experimented with on a local scale and if found to help economic growth, they are subsequently adopted in other regions. We call this a strategy of "local reform." With regard to the temporal dimension, each reform is carried out stepwise and is usually completed over several phases. We call this a strategy of "partial reform." Neither strategy necessarily leads to a convergence toward the market. A large risk of partial reforms is that they may create strong vested interests that resist further reforms. The dual-track price system was a partial reform. It created large gaps between the market prices and planned prices which led to rampant rent-seeking activities. Government officials and state-owned enterprise (SOE) managers who controlled scarce resources gained from the dual prices and opposed the convergence of the two tracks toward a complete market. This also occurred in the case of the SOE reform. Incorporation was adopted in the 1980s as a way to reform the SOEs. It gave the SOE managers autonomy but did not establish a functioning corporate governance structure to monitor them. This partial reform could become a stable equilibrium because SOE managers benefited from it and the government was content with the preservation of the state

ownership. Local reforms also run the risk of creating vested interests. For instance, the dual-track exchange rate regime gave some regions (e.g., special economic zones [SEZs]) the privilege to convert their foreign earnings into Chinese renminbi (RMB) at the market rate, which was equivalent to a government subsidy to exports. In order to preserve the advantage over other regions, these privileged regions would oppose the merger of the market and official rates. On the other hand, local reforms might lead to the rejection of reforms by some regions under the name of *yindi zhiyi*; that is, these reforms are only good in the regions where they were experimented and do not suit the local conditions. One of the forces breaking the stalemate of partial and local reforms has been the self-reinforcing cycles leading to convergence, which were created by the market reforms.

There exists another criticism of China's gradual reform. Partial and local reforms compromise the distortions in the economy; new institutions have to introduce new distortions to neutralize the old ones. Gradual reform could thus lead to the accumulation of distortions rather than to the convergence to a functioning market. However, this criticism ignores one possibility; that is, gradual reform creates new elements whose chances of survival depend on the market and thus become strong supportive forces for the convergence toward the market.

In Chapter 5, the theoretical model discussed several mechanisms for local reforms to converge to the market; this chapter discusses the mechanisms for partial reforms to converge to the market. We first note that reforms are often carried out by and affect only subsets of people in the country. For example, the rural reform, despite its grandeur, was carried out by rural residents; urban residents were passive receivers of its impacts (fortunately, mostly positive). The SOE reform was also a large reform with grand implications; however, the subset of people that it directly affected included only SOE employees. Although other people participated in the discussions and debates, they did not play a critical role in the reform. In the meantime, reforms created gainers and losers; other things being equal, the numbers and powers of the gainers and losers determined whether or not the reform could be carried out. In China's reform history, rural reform was perhaps the only reform that created a far larger number of gainers than losers. In the case of all other reforms, there were no clear winners either in terms of number or power; indeed, we often could not differentiate between gainers and losers. However, the voices of the losers were often louder than those of the gainers. The reasons being that first, from the psychological point of view, the values of gains and losses are asymmetric for a person; the value of losses is larger than that of gains. Second, the losers were often those who had enjoyed privileges in the old system. They had more legitimacy and thus more power to defend their interests than those who were about to gain from the reform. The logic of the Chinese reform was not to persuade the losers, but to create more gainers and raise their political visibility and influences so that eventually their

number and power would surpass those of the losers, and the convergence of the reform would become a natural consequence. Human intentions played a role in this process, but reform itself played a more important role—it created its own supporters. Next, we will provide a critical narrative of China's path of reform using the above framework.

The rural reform restored family farming and provided incentives for peasants to raise their agricultural outputs. However, there was a limit to this growth because the increase in labor input inevitably met the constraint of diminishing marginal return to labor under a constant amount of land. As a result, peasants needed to find non-farm employment if they wanted to continue raising their income. The township and village enterprises (TVEs) were a natural result. This was an institutional innovation complementary to both the rural reform and the old system. It was complementary to the rural reform because it provided non-farm employment to peasants; it was complementary to the old system because it conformed to the collective-ownership-gained political legitimacy. In terms of both ownership and management, the TVEs were mid-way institutions. Their ownership was not clearly defined. Nominally, they belonged to the village or the township; however, in reality, they were controlled by entrepreneurs. However, entrepreneurs were not the only people who contributed to their management; the village or township government also made contributions. For people who believed in perfect market institutions, the TVEs would never succeed. However, they succeeded in China and the reason for this was that they were a reasonable, albeit sub-optimal, response to the existing institutions at the time.

The success of the TVEs not only reinforced the rural reform but also helped the dual-track price system to converge to the market track. The TVEs benefited tremendously from the dual-track price system. This system, being a mid-way institution itself, opened up part of the market and allowed the TVEs to tap into the material supply and markets that were originally controlled by the plan. The dual-price system created its own exterminator—it provided space for non-state elements to emerge, but these elements could only survive and flourish in the market track and thus became its staunch supporters. Although there were strong calls and some actions to return to the plan after the 1989 student movement, the TVEs had become an indispensable part of the Chinese economy and demonstrated their legitimacy by their contribution to the national GDP. In the end, market proponents won the debate and the dual-track prices were unified with the market prices.¹ Interestingly, the institutional foundation for the TVEs vanished with the conclusion of market transition, and privatization began quickly in the early 1990s. By the end of the 1990s, the TVEs virtually vanished.

1. The stable macroeconomic conditions in the early 1990s were another important cause for the unification of the two tracks of prices. See Chapter 9 for details.

It was not a coincidence that privatization started with the TVEs. In the first place, they appeared just because people wanted to circumvent the barriers set up by the planned economy. As long as the plan was accepted by the market, it was natural for them to become privatized. Thus, China finished one round of positive reform cycle from the early 1980s to the early 1990s—the dual-track price system provided surviving space for the non-state economy; the growth of this economy demanded larger shares of the market track; and then the unification toward the market track allowed the privatization of the non-state economy.

The 1990s witnessed another round of reform cycle converging toward the market. Markets gave private firms, many of which were privatized TVEs, space to flourish and compete with the SOEs. The financial performance of the SOEs began to deteriorate and the drawbacks of state ownership were exposed. This led to a new round of SOE reform. In contrast to the contracting system adopted in the 1980s, this time, privatization was the major way of reform. Because of its inherent problems—the lack of a factual owner, the lack of incentives, over-employment, and so on—government ownership lost to private ownership in market competition. On the other hand, decentralized private ownership is highly complementary with the market because the market itself is a decentralized resource allocation mechanism.

We can provide other examples to show how one reform created a positive cycle converging to the market. Openness is one of them. It started in the four SEZs, but other regions began to ask for the same policy treatments enjoyed by the SEZs. Quickly, the government designated 14 cities as coastal open cities (COCs), set up a coastal open belt, and granted Shanghai SEZ status. In the end, inland provinces obtained SEZ policy treatments through various forms of economic and technological development zones. Here, the driving force of the positive cycle is the competition among regions. Openness has not only helped China's economic growth but also accelerated the pace of domestic reforms. In particular, China's accession to the World Trade Organization (WTO) has accelerated SOE privatization, government reform, and the modernization of laws and regulations.

It appears that China's gradual reform did not follow predetermined principles, and its mid-way institutions seem to be inefficient. However, these mid-way institutions were the best responses to the historical conditions from which they arose, so their combination became the most effective path of reform. They were examples of Aoki's institutional diversity, which requires that different institutions be adopted under different times and at different places. Indeed, we do not wish to deny that China's gradual reform has also benefited from the clear resolution of reform on the part of a strong section in the Chinese Communist Party (CCP). For instance, the voices calling for a return to the plan were articulated by powerful people inside the party. It was Deng Xiaoping's tour of the south that saved the reform. One again, this shows the importance of ideology.

Regional competition, complementarities of market reforms, and the central government's ideological shifts are the three critical factors leading China's gradual reform toward the market.

6.4 CONCLUDING REMARKS

Society is organic in the sense that its components are linked together in a complex way. It is more suitable to study human society using the same approach—emphasizing entirety rather than analytics, an approach used by Chinese medical doctors to study anatomy. However, this approach is incapable of providing a well-defined analytical framework for us to detect the mechanisms behind the entire society. Institutional complementarities provide us an analytical tool so that we can analyze the mechanisms of institutional change under a framework of entirety. However, the existing studies on institutional complementarities are mostly narrative, and more serious modeling is required.

China's gradual reform provides a good case of institutional complementarities. It has not been trapped in partial and local reforms because institutions in different areas are complementary along the market dimension; that is, market liberalization in one area raises the gains of market liberalization in other areas. The critics of gradual reform have not realized that gradual reform itself creates new market elements that increase the demand for market reform. They have also ignored the Chinese government's ability to learn and adapt.

With this chapter, we have completed our theoretical discussions. The remainder of the book will provide five examples to illustrate the general conclusions we reached in our theoretical discussions. These five examples cover rural reform, SOE reform, price reform, openness, and financial reform. We will combine our theoretical analysis with our narrative of the reform process, with specific efforts to spell out the details of some reforms, so that the text is accessible to the reader. We will aim at the rural and SOE reforms showing the importance of ideological shifts and regional competition in pushing forward reforms; the price reform will focus on how institutional complementarities led to convergence toward the market; and openness and financial reform will showcase the role of volitional pragmatism in China's gradualism. After presenting these case studies, we will put forth a summary of the current status of reforms and point out the direction for further reforms.

CHAPTER
7

The Rural Reform: A Pareto-improving Reform

If there have been any Pareto-improving institutional changes—institutional changes for the betterment of everyone—in China’s reform history over the last 30 years, the rural reform has to be counted as one of the most significant ones. The reform started spontaneously from the grassroots level in some isolated localities in 1978 but quickly spread to other localities despite intense political opposition from both the central government and local authorities. By replacing collective farming with family farming, the reform greatly boosted agricultural outputs. More importantly, it empowered peasants and helped them regain their status as owners.

This leads us to ask the following questions: How did the rural reform come about? Why did the Chinese reform start with the rural reform? How has the rural reform influenced other reforms?

There have certainly been numerous studies on rural reform. However, what this chapter aims to offer is a reinterpretation that treats the rural reform as a process of interplay between local innovation and central ideological discontinuity. Viewing institutional change as ideological discontinuity is quite different from the conventional views held in mainstream economics. The rationality assumption and equilibrium analysis confine the economic explanations of institutional change to a narrow group of institutional changes that fit into the mechanical routines prevailing in mainstream economics. In most cases, institutional changes are attributed to changes in exogenous parameters leaving institution itself in a black box. Studying the role of ideology is one way to unlock this black box.

The Chinese rural reform provides a good example of how institutional change is made possible by discontinuous ideological shifts in response to experimentation at the grassroots level. To begin with, the ideology behind Chinese rural institutional

arrangements had only been decided upon by Mao's authoritative power and had not won unanimous support within the Chinese Communist Party (CCP). Agricultural production under the commune system was at the verge of collapse in the mid-1970s. The presence of large numbers of beggars and destitute people all over the country was one manifestation of this imminent collapse. This was followed by the experiments in Anhui Province, dramatized by the story of Xiaogang Village in which eleven peasants stamped bloody fingerprints on a contract enabling them to start family farming. Before the experiment, people in Xiaogang Village preferred begging; one year after the experiment was begun, the problem of food supply was almost completely resolved. The success of the experiments in Anhui Province triggered a series of larger experiments, which ultimately put pressure on the central committee of the CCP to revise its ideology. The change in ideology did not come easily; it took eight years for the commune system to be officially dismantled.

The key driver of the convergence of ideology was the success of the experiments. The results of the experiment showed that the reform not only improved the agricultural output but also the conditions of the poorest. That is, the reform brought a Pareto improvement to the whole population, a result that forced even the most conservative party leaders to think twice about their conviction.

The impacts of the rural reform have been profound, especially in the initial stage of reform. Two key lessons learned from the rural reform were that incentives were important for economic performance and that decentralization worked better than centralization. An indicator of these two lessons was the prevalence of contracting as a way of reform in the 1980s. The most significant were contracting in state-owned enterprises (SOEs) and fiscal decentralization that offered different revenue-sharing contracts to different provinces. Although the drawbacks of contracting were later realized by policymakers as well as scholars, incentives and decentralization have since become deeply rooted in the Chinese view of reforms.

7.1 THE HISTORICAL ROOTS OF RURAL REFORM

7.1.1 The Commune Period¹

The CCP had a long-held conviction that China's landholdings should be equally distributed. Immediately after the party came into power in mainland China in 1949, land reform began on a large scale. The reform lasted for a very brief period and was completed

1. This section draws on Yao (2007).

by 1953. Land was confiscated from landlords and rich peasants and given freely to poor peasants. As a result, landholdings moved toward a complete egalitarian distribution. For example, a large survey found that the average farm area after the land reform was between 0.74 and 1.6 hectares (Bo 1992). It is noteworthy that the accomplishment of the land reform in terms of land distribution was moderate in many localities because small landholdings prevailed even before the reform. For example, Qin and Su (1994) find that central Shaanxi Province did not have many qualified landlords when the land reform was implemented. However, the marginal effect of the land reform was substantial in terms of economic efficiency as grain output increased dramatically in the first few years of land reform (D. Yang 2006, Table 3, 33).

Mao Zedong (Tse-tung) envisioned in his 1940 treatise *China's New Democracy* that private land ownership would be allowed to exist for a long time before public ownership would prevail. However, several factors led him to believe that a quicker transition was needed and was indeed possible. First, private land ownership quickly led to polarization of the peasants. Based on the classical Marxist prediction, public ownership would eliminate economic inequality. Second, the State lost control of food supply under private land ownership. In order to finance China's fast industrial development, which the top leadership believed was the important force for China's modernization, the government had to suppress the price of food while maintaining a stable supply. Public ownership was believed to be the key to stabilize low-price food supply (Bo 1992). Third, socialist transformation of capitalist firms progressed unhindered with only mild resistance from the capitalists. In addition, industrial development under state planning had achieved great initial success. This last factor led Mao to believe that faster transformation in agriculture; that is, collectivization, was also possible. Therefore, collectivization was expedited in the 1955–1957 period. By the end of 1956, 96.3% of all rural households had joined agricultural producers' cooperatives (APCs) (Yang 2006, 31). In an APC, a group of households pooled their land, production tools, and draft animals and were only remunerated for their labor inputs. While in theory, they still had the option to leave the cooperative, in practice, quitting was seldom allowed (Kung 1993).

The collectivization movement culminated in 1958 when all the cooperatives were consolidated and turned into large communes. This year was recorded as the year of extreme collective hysteria and irrationality in China. As part of the Great Leap Forward, China set the target to overtake the United Kingdom in steel production within one year (Bo 1992). In order to achieve this target, the whole country was mobilized to produce steel. The CCP created an illusion to engender the belief among the population that communism, which for most people meant “two-story houses, electric light bulbs, and telephones,” would be realized overnight. People began to construct brick

and mud furnaces to produce steel. In the meantime, rural households began to dine in communal dining halls, and household cooking became unnecessary and was prohibited. People gathered everything from ores, household utensils, farm tools, to even door handles, that could be turned into steel, and put them into the furnaces. However, in most cases, useless iron nuggets were the only products.

In the countryside, people were also mobilized to build reservoirs and other irrigation facilities as well as to produce steel. Land was thus not well attended to despite which 1958 turned out to be a bumper year. However, the exaggeration of agricultural outputs was the rule of the game; outputs of a dozen tons per mu of land (one mu is equal to one fifteenth of a hectare) were frequently reported in newspapers. The practice of eating in communal dining halls destroyed the saving mechanism embedded in the psyche of the Chinese families and wasteful consumption prevailed (Chang and Wen 1998).

The result of the Great Leap Forward and communization was an unprecedented disaster—20 to 40 million people died of starvation in the subsequent three years. Following Lin's (1990) seminal paper, there have been several studies that offer diverse explanations to the causes of this Great Famine. While a summary of these studies is beyond the scope of this chapter, explanations that are related to the nature of the commune system are worth mentioning here.

In his 1990 paper, Lin ascribed the cause of the famine to the commune's deprivation of the exit right. He provided a verbal model to show that the lack of the exit right led to a serious free-riding problem in the commune system and resulted in a sharp decline of the agricultural output. This reasoning is criticized by Kung (1993), Liu (1993), and D. Yang (2006) on the grounds that it is not consistent with the timing and the nature of the historic events. Dong and Dow (1993) also criticize the model based on the fact that the lack of the exit right could just as well have led to more cooperation within the commune; this is akin to the situation of people stranded on a life boat—with no means to escape on their own, it is better for them to cooperate with each other. In general, it is unlikely that the lack of the exit right could lead to a dramatic famine that claimed the lives of millions of people in a very short time. The Great Famine must have been triggered by multiple causes. The frenzy of communization, the Great Leap Forward, the exaggeration of outputs, the communal dining halls, the lack of transparency, and Mao's arrogant attitude against criticism (especially in response to criticism by Marshall Peng Dehuai in the Lushan meeting) contributed to the famine.

During the Great Famine and the following brief period of economic adjustment, family farming was allowed as an emergency means to produce food. As noted by D. Yang (2006), the provinces that were affected most severely by the famine were the ones more inclined to adopt family farming. The most telling case was that of Anhui Province. It registered a 4.75 increase in mortality rate during the 1959–1962 period over

the 1956–1958 period, the highest in the country. Its party secretary Zeng Xisheng was a zealous promoter of the Great Leap Forward, but changed his standing after the famine. He became one of the most enthusiastic provincial leaders in promoting family farming. It is also not surprising to find that the rural reform of the late 1970s was also initiated in Anhui Province. This led D. Yang (2006) to hypothesize that the reform could be traced back to the Great Famine. We will return to his argument shortly.

Family farming was regarded as being against the socialist ideology although its merits in terms of increasing output were even acknowledged by Mao himself (D. Yang 2006). As a result, family farming was quickly forbidden by the central government soon after food supply resumed. The commune system was based on a three-tier system consisting of the commune, brigade, and production team, with the production team functioning as the basic unit of the organization of agricultural production. Apparently, this system paid heed to the lessons learned in the Great Leap Forward and the ensuing Great Famine, which lasted until 1984 when the commune system was formally dismantled.

It would be a mistake to completely ignore the achievements of the commune system. The system granted the State the power to mobilize large amounts of resources and people to engage in large-scale irrigation and social projects. In most parts of present-day China, peasants still depend on the irrigation facilities built during the collective period. In addition, we have seen that China's rural illiteracy rate dropped considerably and life expectancy increased dramatically during the collective period. A basic cooperative healthcare system that covered almost the entire rural population was established. Although its cost effectiveness can still be debated upon (some argue that it was subsidized by the commune system), it is undeniable that the system had contributed to the improved health conditions in rural China. When comparing China and India, Sen (1998) argues that China's better educated and healthier population at the outset of the reform put China on a lead in terms of the preparation for economic growth.

A balanced view is to weigh the commune's achievements against its costs. While the achievements were substantial, the costs were also immense. The loss of economic efficiency was significant, but the deprivation that the peasants endured was even more significant. Under the commune system, the peasants were bound to the land by the household registration (*hukou*) system; they could neither move to the city, even temporarily, nor could they move to another village. They were forced to work together, but could not choose what to sow in their fields and had to sell all their surplus grains to the State. A large amount of their surplus was transferred to the city through the price scissors. When Sen emphasizes the achievements made during the collective period, he is, in fact, defending the values embedded in those achievements rather than defending the commune system itself.

7.1.2 The Road to Reform

In his book *Calamity and Reform in China*, Dali Yang (2006) distinguishes between two theories regarding the causes of rural reform. One theory puts the CCP leaders, especially Deng Xiaoping, at the center stage of the reform, whereas the other, emphasizes the role of the Cultural Revolution—its outcomes were so devastating that people believed something had to be changed. Yang believes that neither of the theories captures the most important cause of the reform; he insists that the reform should be traced back to the Great Famine. For him,

By tracing the causal patterns leading from revolution to famine and then to reform, this book explains much about how and why the Chinese Revolution self-destructed. While standard interpretations of the causes of rural reform emphasize the impact of the Cultural Revolution and the role of leaders such as Deng Xiaoping, I suggest that these two factors, alone or together, are inadequate to explain what happened. The rise of rural reform was effected not just by the words and actions of such prominent leaders as Deng Xiaoping, as the conventional literature would have us believe, but also by the initiative of tens of millions of ordinary Chinese who had not the slightest idea of producing reform but did it anyway in response to the Great Leap Famine. By debunking official Chinese rhetoric (and derivative scholarly writings) christening Deng Xiaoping the chief architect of China's reforms, this study underscores the crucial need for scholars of China to go beyond official discourse and seek independent answers that emphasize both agency and historical structure, as well as contingency. (D. Yang 2006, ix)

While the analysis by Dali Yang (2006) has much to recommend, especially when viewing it against the fact that the rural reform did start in areas greatly affected by the famine, to make the famine the single-most important cause for the reform is an overarching argument. For one thing, there was a gap of nearly 20 years between the reform and the famine. Family farming should have been preserved in the early 1960s if the Great Famine had been the major cause for the long-lasting reforms. That notwithstanding, there is another more substantial gap in the logic of Yang's argument. For the famine to qualify as the direct cause of the reform, the peasants had to have realized that collective farming was a direct cause of the famine during the 1959–1962 period and their dire living conditions at the end of the 1970s. That is, collective farming caused the Great Famine, and to avoid starvation again, collective farming must be abandoned. However, even Yang himself contends that collectivization alone could not explain the Great Famine. As Yang states, when refusing Lin's (1990) explanation of the famine by revoking the lack of exit rights in the commune: "For my purpose, however, Lin dealt with changes in agricultural productivity but not with the causes of the famine" (D. Yang 2006, 54). Unfortunately, productivity decline may lead to the dismissal of the commune system, if it did not lead to the famine.

It is necessary to determine the causes of the rural reform from the chronic deficiencies of the commune system set up after the Great Famine. For this purpose, several related facts during this period are of particular relevance here.

The first is that agricultural output was maintained at a positive growth rate in most years since the Great Famine ended in 1962 (D. Yang 2006, 105, Figure 4). This was true even during the Cultural Revolution. In fact, with an annual average of 2%, Chinese agricultural growth did not lag behind that of other developing countries during the same period.

The second fact is related to the total factor productivity (TFP)² of the commune period shown in Figure 7.1, originally prepared by Wen (1993). It is astonishing to find that the TFP started to decline as soon as collectivization began during the 1955–1957 period. The TFP nosedived in 1960, the year of the greatest famine. What is more alarming is that the TFP remained roughly at the level it was at during the famine years

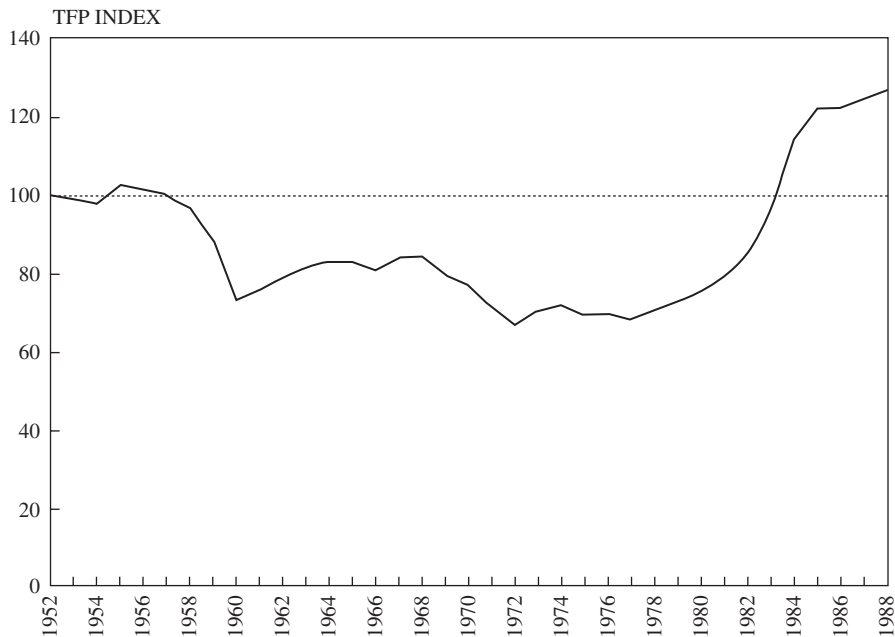


FIGURE 7.1 TFP of Chinese agriculture: 1952–1989

Source: Wen 1993, Figure 6.

2. Generally speaking, TFP is a measure of how efficiently an economy, a firm, or a farm household uses inputs—labor, capital, and so on—to produce output.

Table 7.1 Labor days per hectare

Crop	1953	1978	1985
Rice	250	421	328
Cotton	300	908	643
Wheat	120	461	218

Source: Naughton 2007, 242, Table 10.2.

before the rural reform started in 1978, and did not recover to the level of 1958 until 1984. Therefore, output growth during the commune period was not achieved by more efficient use of labor, land, and other agricultural inputs.

This leads us to the third fact presented in Table 7.1, which is adopted from Table 10.2 of Naughton (2007). The table shows the number of labor days spent on a hectare of land in 1953, 1978, and 1985. Between 1953 and 1978, the labor days in rice production increased by 68.4%; the rise in cotton and wheat production grew substantially by 2.03 and 2.84 times, respectively. In contrast, the labor days in 1985 decreased by 22%, 29%, and 53% for rice, cotton, and wheat production, respectively, as compared with those in 1978. Coupled with the second fact, this means that output growth during the commune period was mainly achieved by increased deployment of labor; in addition, many of the labor days were wasted because between 1978 and 1985, output increased but the number of labor days decreased.

The inefficient use of labor serves as an explanation for the last fact that per-capita grain output remained about the same between 1952 and 1978 (D. Yang 2006). Chinese population increased by more than 200 million between the 1950s and the end of the 1970s. Most of the newly added population lived in the countryside. In addition, 20 million urban youth were sent to the countryside, leading to further overcrowding and dependence on the already dwindling resources.

Some authors attribute the low efficiency of the commune system to its ill-defined remuneration system. For example, Putterman (1993) believes that the work-point system adopted by the Chinese commune system did not reflect the true contribution of each individual. Others (e.g., Lin 1990) are more critical about the general nature of the commune system; that is, its strong tendency to induce opportunistic behavior. The abovementioned facts clearly favor the second line of argument. Putterman raises a hypothetical reference point of a better remuneration system. However, since the work-point system was invented by local production teams, there is reason to believe that it was close to an equilibrium outcome under the commune system. However, the opportunist argument may not capture the entire story either. Collective farming was just

one face of the commune system; there were also other sides that hindered agricultural efficiency. One of them was that the commune system served as a means for the State to extract from the peasants. Although the state grain procurement as a share of the total grain output declined since the Great Famine, the procurement prices remained low and constant between 1967 and 1978 (D. Yang 2006, Figure 6). Even by the most conservative estimates, the total amount of state extraction through low procurement prices remained at RMB 200 billion (Wu 2001). The other destructive side of the commune system was its suppression of peasants' freedom to choose their own economic activities and to move without bounds. This had a direct destructive effect on agricultural production as well as an indirect, but perhaps, more profound effect on the rural society. People began to feel tired of and even resentful of the system. Not only was agricultural production affected, rural society also began to fall apart. Understanding the multiple facets of the commune system will provide us with more insights into the reasons for its fall.

The historical roots of the rural reform are closely associated with two related factors—the inefficiency of the commune system to motivate people and the State's tight control on people's choices. The State controlled the peasants' choices in order to extract resources from the countryside. However, this destroyed the peasants' morale to work, given the already distorted incentive structure. To guarantee extraction, the State had to tighten its control, and to a large extent, narrow down the scope of its objectives, as manifested in the "grain first" policy, which led to a further decline in peasants' incentive to work. What is often neglected by both academic researchers and official narratives is that the rural reform comprised two parallel actions—restoring family farming and raising agricultural prices. In 1979 alone, the state procurement price for grains increased by 27%. The prices of cash crop had increased several years earlier (D. Yang 2006, Figure 6). Price increases meant that the State reduced its rate of extraction. The extraordinary growth of agricultural output between 1978 and 1984 was best explained by both the restoration of family farming and reduced state extraction.

7.2 THE INTERPLAY BETWEEN INNOVATION AT THE GRASSROOTS LEVEL AND CHANGES IN THE CCP'S IDEOLOGY WITH REGARD TO RURAL REFORM

By the early 1970s, the growth in Chinese agriculture had considerably decelerated; growth eventually came to a standstill in 1976 and 1977 (Figure 7.2). Prior to that, the commune system had maintained agricultural growth mainly by more labor inputs (Table 7.1). By the mid-1970s, peasants were tired of this treadmill model of growth and

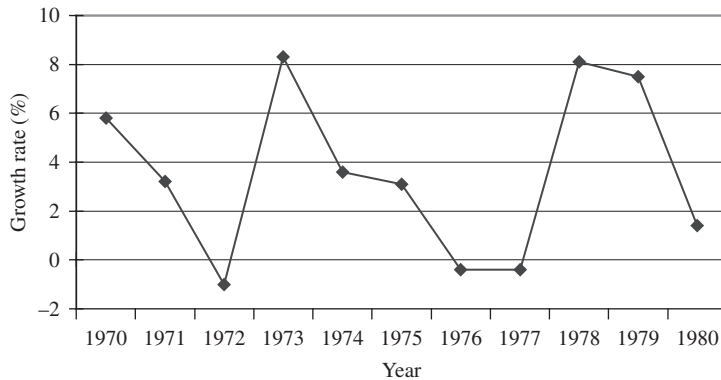


FIGURE 7.2 Growth of agricultural output in the 1970s

Source: NSB 1991.

their enthusiasm for agricultural production faded. There was an acute food shortage in the country. During the period from 1971 to 1976, the total deficit in grain supply was 10 million tons (D. Yang 2006, 123). The grain output in 1977 decreased from that in 1976 by 3.55 million tons. Decline in cotton output was even more drastic. To cover the shortfalls, the government had to spend 2.1 billion dollars, one fifth of China's foreign reserves, to import grain, cotton, edible oil, and sugar (ibid., 129). Most of these imports, however, went to fulfill the supply to the urban residents. As in the Great Famine, the costs of grain shortage were mostly footed by the peasants. Large flocks of beggars began to move around the country in the mid-1970s. It was imminent that another famine was likely to hit the countryside. Luckily, the peasants were proactive this time to the extent that the peasants' own fear of another famine started the rural reform. Dali Yang's thesis is quite correct—it was the memory of the Great Famine that led to rural reform. However, to make the reform a long-lasting institutional change, we have several key gaps to fill.

There have been several excellent accounts of the process of rural reform in both Chinese (e.g., Ling 1996; Du 2006) and English (e.g., D. Yang 2006). Hence, we will not repeat these accounts in this book. Instead, we will only highlight several key developments that led to or symbolized the change in the ideology of the CCP leadership. Our purpose is to show the reader how the CCP's ideology and reforms at the grassroots level influenced each other and finally converged to family farming.

We will begin by noting that even the moderates were not ready to envision family farming after the fall of the "Gang of Four." Communist conviction and the memory of the Cultural Revolution rendered family farming an unattractive option. Therefore,

the document of the work meeting for the Third Plenum basically reiterated the policies set by the “Agricultural Sixty Articles” that instituted the three-tier commune system after the Famine. This document was prepared by Hu Yaobang, who would soon head the efforts to rehabilitate the victims of the past political movements and eventually become the party secretary.

Peasants were not concerned with convictions though; they had empty bellies to fill. Some villages in remote areas had secretly maintained group farming since the famine ended in the early 1960s. A new wave of group and even family farming began in the scattered areas of Anhui and Sichuan, the two provinces that registered the highest loss of lives in the Great Famine.

The initial spread of family farming in Anhui Province was an outcome of the provincial government’s crisis management measures. Anhui had a severe draught in 1978 that affected nearly 90% of its cultivated land. The new provincial leadership headed by the legendary reformer, Wan Li, decided to lend each peasant one mu (0.165 acres) of land for private cultivation. This small gesture encouraged peasants to try more liberal measures such as group contracting (*dabaogan dao zu*), family output contracting (*baochan daohu*), and family farming (*dabaogan daohu*). By the end of 1978, 1,200 production teams (less than 1% of the total) in Anhui had adopted family production contracting (D. Yang 2006). While contracting was believed to be allowed by socialism, family farming was thought of, by the majority, as politically unacceptable. This was why the 11 peasants in the now legendary Xiaogang Village signed a contract with their bloody fingerprints when they decided to adopt family farming in January 1979. The county leadership advocated group contracting although it did not stop Xiaogang’s experiment. The political stake in connecting with the existing ideology was much higher for party leaders than for ordinary peasants.

Things were better in Sichuan. The reform started in Guanghan County, where in one village, land was secretly given to three groups for farming in as early as 1974. The Guanghan party secretary learned about this in 1977 and with the support of the provincial party secretary, Zhao Ziyang, began to experiment group contracting in 1978 in the commune to which the village belonged. (Zhao Ziyang would soon become the premier and then the CCP party secretary because of his reform initiatives in Sichuan.) Soon, the entire province began group contracting with the endorsement of Zhao Ziyang. Output in Sichuan was boosted. The saying of the day went: “Want to eat? Find Ziyang” (*yao chiliang, zhao ziyang*).

However, at the central level, things moved more slowly. *People’s Daily* published articles opposing the reform in March 1979. Even reformers were not sure whether family farming should be the direction to head toward. For example, in 1979, Du Runsheng, the pro-reform veteran agricultural policymaker, held the belief that group contracting

was the least palatable option for reform. He changed his mind only after he was convinced by the outcomes of family farming (Ling 1996). The reformers had to proceed strategically. As Du put it 27 years later,

Once *baochan daohu* was implemented, it was equivalent to a direct assault to the people's communes that, numbering in more than 100,000 and having land and labor force, were economic entities. The assault on the commune ownership must encounter tremendous resistance. The stronger the assault was, the larger the resistance would be. Therefore, to encourage *baochan daohu*, we had to reduce resistance and increase help as much as possible, so a half-way stop could be avoided. (Du 2006, 3)

Du summarized three strategies for the reformers to promote family farming. One was “not to mention getting rid of people's communes, but just [say] to implement the production responsibility system inside the people's communes” (*ibid.*). This would make it easier for the reformers to win over many opponents. The second strategy was to allow many forms of the responsibility system in order for the peasants to choose from.

[We] did not impose our subjective preferences on the masses; we respected the masses's choices. Now looking back, the masses were happy to choose the form of *dabaogan* [family farming]. ‘*Dabaogan*, straightforward and no turns; fulfill the quota to the state, leave enough to the collective, and the rest is mine.’ The incentives were direct; the relationship was simple. [We] proposed that it was up for the masses to choose. This was also good [for us] to test the feasibility of our ideas. (*ibid.*)

The third strategy was to start with local experiments. By the spring of 1979, Anhui had already begun to experiment with family farming. However, in the first meeting of the newly established National Commission on Agriculture held at that time, five out of the seven provinces that were invited to the meeting opposed Anhui's experiment. The final document of the meeting forbade *baochan daohu* in general, but made a small exception—it was allowed in remote areas; in other areas, it was not to be reverted, if adopted.

The reformers quickly grabbed this opportunity to encourage the adoption of family farming on a larger scale. Du Runsheng played an important role in this effort. As he recalled in 2006,

In 1980, another window opened, and [*baochan daohu*] spread to all the poverty areas. At that time, [the government] needed to solve the food problem in those areas; [some provinces] had to import grains from other provinces. There were more and more importing provinces, and there were less and less exporting provinces. [In the spring] the central government held the long-term planning conference. The then director of the State Planning Commission Yao Yilin discussed with me how to reduce grain subsidies to the poverty areas. I suggested to give *baochan daohu* a try and let peasants solve their food problem by themselves, [so] they did not need to rely on subsidized grains. . . . Yao Yilin thought [my suggestion] had a virtue and reported it to Deng Xiaoping. Deng

Xiaoping agreed and said: 'Poor areas can do it; [they] can come back if things go wrong. It does not matter. [Areas that] can feed themselves do not need to do it.' A large window was opened since. (Du 2006, 4)

In May 1980, Deng Xiaoping went a step further to make the following statement:

Now that more flexible policies have been introduced in the rural areas, the practice of *baochan daohu* has been adopted in some localities where it is suitable. It has proved quite effective and changed things rapidly for the better. *Baochan daohu* has been adopted in most of the production teams in Feixi County, Anhui Province, and there have been big increases in production. Nearly all the production teams in the same province's Fengyang County ... have been practicing *dabaogan*, which in a year has resulted in an upswing in production that has transformed the county's prospects. Some comrades are worried that this practice may have an adverse effect on the collective economy. I think their fears are unwarranted. (D. Yang 2006, 166)

In the early 1980s, Hua Guofeng was finally removed from his posts as the CCP chairman and premier of the State Council. A new leadership with Deng Xiaoping at the helm came into power. In the meantime, systematic studies were carried out on the positive effects of different types of responsibility systems. Table 7.2, which has been quoted from D. Yang (2006), provides data for four counties in Anhui Province during the 1978–1979 harvest years. It is clear that more liberal reforms produced higher growth rates of output. In Chuxian County, where the reform was more actively pursued, the most liberal form of reform, *baochan daohu*, had resulted in an astonishing growth of 68.9%, whereas villages without any reform had only registered a modest growth rate of 4.3%. In Lai'an and Jiashan, villages without any reform had

Table 7.2 Output growth under different responsibility systems (percentage change, 1978–1979)

Form of responsibility system	Quanshu	Chuxian	Lai'an	Jiashan
Whole county	12.4%	12.5%	0.7%	0.3%
No reform	6.0	4.3	-6.7	-6.3
With reform	12.8	16.5	5.0	6.0
<i>baochan daoze</i> (contracting output to group)	12.7	16.3	3.4	4.0
<i>baogan daoze</i> (contracting everything to group)	n.a.	n.a.	15.9	12.5
<i>baochan daohu</i> (contracting output to household)	35.7	35.7	37.1	31.0

Source: D. Yang 2006, 168, Table 26.

Note: n.a. = not applicable; n.d. = no data available

experienced substantial reductions in output, but villages adopting some form of reform had achieved positive growth; those adopting *baochan daohu* achieved growth rates of more than 30%.

These developments led to the No. 75 Document in the fall of 1980; this document formally acknowledged Du Runsheng's suggestion and the direction set by Deng Xiaoping. At this point, various forms of the responsibility system began to flourish all over the country. The ideology of the CCP was clearly lagging behind what was happening at the grassroots level. The positive effects of the reform were undisputable. "Poverty areas had enough to eat the second year; other areas could also increase output" (Du 2006, 4). It was time for the CCP to revise its ideology. This came at the end of 1981.

In the winter of 1981, the central government held the national work meeting on rural issues. Soon after the meeting, [we] drafted the 1982 No. 1 Document (*Minutes of the National Work Meeting on Rural Issues*), which formally acknowledged [using] peasant household contracting of land to replace collective farming under people's communes. *Baochan daohu* has since become the central government's decision. (Du 2006, 4)

Since 1982, there were five more No. 1 Documents that dealt with the agricultural issues. The path of reform was set, and *dabaochan*—family farming—spread quickly to virtually every corner of the country by the end of 1983 (Table 7.3). In 1984, the people's communes were formally dismantled.

Several interesting observations can be connected with our theory of institutional change as ideological discontinuity. First, the ideology of the CCP always lagged behind the developments at the grassroots level; it changed gradually and was reflective of the ground realities. By the time that family farming was formally acknowledged by the CCP as an institution to replace the commune system in its No. 1 Document for 1982, close to 40% of the villages had already adopted it. This is a clear example of how ideology is resilient and how it requires intentional human actions challenging the existing institutions to effect a change. Second, small steps of ideological relaxation at the center always led to more changes at the grassroots level that continued to challenge the existing institutions. This in turn forced the center to revise its ideology. It is clear from Du Rensheng's account that allowing poor regions to try *baochan daohu* in 1980, a small step of ideological transformation, led to the rapid spread of family farming. Third, the interplay between the ideology of the CCP and the grassroots experiments could finally converge to full family farming only because family farming and reforms toward that direction had produced continuous positive results that benefited all the peasants. In other words, this was possible only because the reforms had produced Pareto-improving results—results in which no one suffered. These types of results were able to bring about

Table 7.3 Spread of the rural reforms: 1980–1983

Form of reform	Jan. 1980	Dec. 1980	June 1981	Oct. 1981	June 1982	Dec. 1983
<i>zuoye chengbao</i> (contracting quotas for jobs)	55.7%	39.0%	24.2%	16.5%	5.1%	n.a.
<i>zuanye chengbao</i> (contracting specialized tasks)	n.a.	4.7	7.8	5.9	4.9	n.a.
<i>baochan dao zu</i> (contracting output to group)	24.9	23.6	13.8	10.8	2.1	n.a.
<i>baochan daoren</i> (contracting output to laborers)	3.1	8.6	14.4	15.8	12.6	n.a.
<i>bufen baochan daohu</i> (partially contracting output to household)	0.03	0.5	n.a.	3.7	2.2	n.a.
<i>baochan daohu</i> (contracting output to household)	1.0	9.4	16.9	7.1	4.9	n.a.
<i>dabaogan</i> (full family farming)	0.02	5.0	11.3	38.9	67.9	97.9

Source: D. Yang 2006, 173, Table 27.

Note: n.a. = not applicable; n.d. = no data available

a change in the most stubborn minds inside the CCP. Finally, the pragmatic attitude of the new leadership, with Deng Xiaoping at the center, was the cornerstone that allowed the reform dynamics to move toward family farming. Had Hua Guofeng remained in power, family farming would have never been able to replace the commune system.

7.3 RURAL REFORM AS A CATALYST FOR FURTHER CHANGES IN THE COUNTRYSIDE

The pent-up energy unleashed by the reform was astonishing. From 1979 to 1984, the gross value of agricultural output maintained a real annual growth rate of 7.6%, and grain output increased at an annual rate of 4.9%. While the hike in agricultural prices certainly played a significant role in bringing about rapid agricultural growth, Lin (1992) noted that 60% of the growth between 1978 and 1984 can be attributed to the adoption of family farming. Notwithstanding academic disputes, the achievements were real: China has since solved its food problem. Although it is still a priority of the government,

food security has since faded away from ordinary public discourse. Looking back today, the impacts of the rural reform have gone far beyond the boundary of agriculture; the reform has become a catalyst and model for the ensuing reforms. The fiscal system of the 1980s, reviewed in Chapter 2, was *baochan daohu* at the macro level—the various contracts between the central government and provinces were a reminder of the various responsibility systems adopted by the rural reform; only now, the magnitude was much larger. In addition, contracting was also adopted in the initial stage of the SOE reform. The political atmosphere at that time was *yibao jiuling*—it works as long as you contract. In the countryside itself, the rural reform unleashed huge amounts of pent-up energy of the peasants, which would soon lead to a wave of rural industrialization centered at the township and village enterprises (TVEs) and another wave of rural-urban migration.

7.3.1 Rural Reform and TVEs³

The establishment of the TVEs, or *xiangzhen qiye*, was not a new phenomenon emerging only after the rural reform. They existed even during the Cultural Revolution, albeit under another name, *shedui qiye*—commune and brigade enterprises. Before the 1970s, China's industrialization was overwhelmingly in favor of large establishments in heavy industries. As a result, the rural area was largely left out of the industrialization process. Ironically, steady growth of the rural industry started in the early 1970s in response to a call for mechanizing agriculture, a policy that was not in touch with China's reality of an abundant labor force. Acting in response to the call, communes and brigades in certain areas, particularly the Yangtze Delta and other urban peripheral areas began to set up factories manufacturing agricultural machinery and repairing farm tools. As the urban factories were paralyzed by fractional fights during the Cultural Revolution, a large market opened up for the products of rural enterprises. As a result, their output value increased from RMB 9.25 billion in 1970 to RMB 27.2 billion in 1976, with an average annual growth rate of 25.7%. By 1978, their output value reached RMB 49.3 billion in 1970 prices, with an employment of 28.3 million. However, in terms of shares, the output value of the commune and brigade enterprises only accounted for 21.2% of the total value of the rural gross output, and the employment rate was only 9.2% of the total agricultural labor (Table 7.4).

During the period of rural reform, the growth of rural enterprises had slowed down and even retreated (Table 7.4). This was brought about by two factors. First, the peasants seemed to be reveling in their newfound status as land owners; second, some of the

3. This section draws on Lin and Yao (2001).

Table 7.4 Development of the TVEs in China from 1978 to 1996 (current prices)

Year	Labor force			Gross output			Industrial output			Rural income	
	No. of firms (mil.)	Amount (mil. persons)	% of total rural labor	Value RMB 100 mil.	% of total rural output	Value RMB 100 mil.	% of national output	Value RMB 100 mil.	% of national output	Per capita Income	Contribution of TVEs (%)
1978	1.52	28.27	9.2	495.1	24.2	385.3	9.1	385.3	9.1	122.9	7.6
1979	1.48	29.09	9.4	552.3	n.a.	425.3	9.1	425.3	9.1	n.a.	n.a.
1980	1.42	30.00	9.4	656.9	23.5	515.1	10.0	515.1	10.0	166.4	10.1
1981	1.34	29.70	9.1	736.7	n.a.	567.9	10.5	567.9	10.5	194.5	n.a.
1982	1.36	31.13	9.2	846.3	30.4	636.0	12.0	636.0	12.0	n.a.	n.a.
1983	1.35	32.35	9.3	1,007.9	24.4	744.3	11.5	744.3	11.5	272.9	n.a.
1984	6.07	52.08	14.5	1,697.8	33.7	1,240.0	16.3	1,240.0	16.3	315.1	n.a.
1985	12.22	69.79	18.8	2,755.0	43.5	1,845.9	19.0	1,845.9	19.0	350.1	24.6
1986	15.15	79.37	20.9	3,583.3	47.7	2,443.5	21.8	2,443.5	21.8	374.7	n.a.
1987	17.50	88.05	22.6	4,947.7	52.4	3,412.4	24.7	3,412.4	24.7	418.4	28.1
1988	18.88	95.45	23.8	7,017.8	56.0	4,992.9	27.4	4,992.9	27.4	494	30.0
1989	18.69	93.67	22.9	8,401.8	58.0	6,144.7	27.9	6,144.7	27.9	540.3	31.2
1990	18.50	92.65	22.1	9,581.1	57.7	7,097.1	29.7	7,097.1	29.7	623.1	26.8
1991	19.08	96.09	22.3	11,611.7	61.1	8,708.6	32.7	8,708.6	32.7	638.9	27.9
1992	20.92	106.25	24.2	17,695.7	69.7	13,193.4	38.1	13,193.4	38.1	746.0	27.1
1993	24.53	123.45	27.9	31,776.9	74.3	23,558.6	48.7	23,558.6	48.7	873.0	32.5
1994	24.95	120.18	26.9	45,378.5	74.2	34,688.0	49.4	34,688.0	49.4	1,144.8	31.8
1995	22.03	128.61	28.6	68,915.2	77.2	51,259.2	55.8	51,259.2	55.8	1,479.5	32.6
1996	23.36	135.08	29.8	77,903.5	76.9	55,901.1	56.1	55,901.1	56.1	1,813.3	34.2
1997	20.15	130.5	28.4	89,900.6	78.5	65,851.5	57.9	65,851.5	57.9	1,987.3	n.a.

Source: Lin and Yao 2001, 146, Table 4.1.

Notes: TVEs include all rural firms, regardless of their ownership. The values of total rural gross output after 1991 only include agricultural and TVE outputs, whereas the values for other years include outputs from other activities such as household sideline production. Rural income is the net income; that is, net of transfer and remittance income.

Table 7.5 Export performance of the TVEs (100 mil. US dollars, current prices)

Year	Total Exports	TVE exports	TVE exports/ total exports
1986	309.42	28.45	9.19
1987	394.37	43.45	11.02
1988	475.40	72.31	15.21
1989	525.38	99.77	18.99
1990	620.91	96.07	15.47
1991	719.10	148.27	20.62
1992	849.40	216.66	25.51
1993	917.44	380.70	41.50
1994	1,210.38	394.64	32.60
1995	1,487.70	644.58	43.33
1996	1,510.66	723.86	47.92
1997	1,827.00	836.93	45.81

Source: Lin and Yao 2001, 147, Table 4.2.

commune and brigade enterprises were dissolved in the process of de-collectivization. However, the growth of rural enterprises was expedited immediately after the rural reform was settled. The momentum was reached in the four years from 1984 to 1987. The number of TVEs reached 6.07 million in 1984, 4.5 times the number in 1983. It doubled again in 1985. The growth slowed down after 1985, but still reached 24% and 15% in 1986 and 1987, respectively. Rural industry quickly became an important income source for peasants. Its share in gross rural output surpassed agriculture in 1987 and reached 78.5% by 1997. The rural industry has also become an important player in the national economy. Its share in the national industrial output increased from 9.1% in 1978 to 57.9% in 1997, and its share of exports increased from 9.19% in 1986 to 47.92% in 1996 (Table 7.5).

Deng Xiaoping once told a group of foreign guests that the TVEs emerged as an expected force—*yijun tuqi*—beyond the government's plans. Indeed, the institutional setup at that time was unfriendly to rural enterprises. Material and product markets were still controlled by government plans and banks did not issue loans to rural enterprises. The central government had not reached a clear vision about the way forward with regard to the planned economy. There was also a political risk. Because the commune system had fallen apart, many of the new rural enterprises were set up by individuals. However, private ownership of factories and labor hiring were still an ideological taboo, and there were cases where individual businessmen were prosecuted for hiring more than eight workers—the threshold number for the owner to qualify as a

capitalist.⁴ Despite the unfriendly environment of the 1980s, the TVEs flourished in the countryside. Several factors had contributed to this unexpected emergence.

First, the rural reform had freed up labor not only from the State's control but also from the land. As shown in Table 1, labor intensity in agriculture decreased remarkably during the reform period from 1978 to 1985. This could only be made possible by a more remarkable increase in labor productivity because agricultural output increased during this period. The reform liberated peasants from the fear of hunger by motivating them.

Second, the fast growth in income during the reform period had enabled peasants to accumulate a considerable amount of wealth that provided the crucial initial batch of investment in TVEs. Therefore, the TVEs could flourish even without external financial support.

Third, there was a large market for consumer goods at that time, which had lowered the entry barriers. This was largely because of the distorted industrial structure in the planned era, which placed excessive emphasis on the development of heavy industries and invested very little in light industries. In fact, rural industry was the most developed in regions where the light industries in the city were more prominent. In their early stage of operation, many TVEs invited technicians and retired workers from the city as part-time employees to help them gain critical know-how.

Fourth, the growth of the TVEs benefited greatly from the dual-track price system implemented between 1985 and 1994. We will provide a detailed discussion on this system in Chapter 9. Here, we just briefly discuss how it facilitated the growth of the TVEs. This system distinguished two price tracks. For outputs within the state plan, there were the planned prices; for outputs beyond the state plan, prices were determined by the market. The system was intended as a transitory phase to eliminate the planned economy. One of its unintended consequences though, was that it gave rural enterprises—which were outside the state plan—a chance to tap into the material and product markets.

Finally, the survival of the TVEs was sustained by the creative approaches of peasants and local cadres to avoid political risks. While there were genuine publicly owned enterprises, a large portion of the so-called TVEs was actually “red-hat” enterprises (*hongmaozi qiye*), which were de facto owned by individuals but had an official affiliation with the local government. Some authors (e.g., Tian 2001) believe that this kind of mixed ownership had productive implications—for example, the local government might help the firm to obtain access to crucial resources such as planned materials and

4. The most noteworthy case perhaps is that of the owner of Fool's Sunflower Seeds, Nian Guangjiu. He earned RMB 1 million in the early 1980s by selling baked sunflower seeds. He was close to being jailed three times but was exempted each time because of Deng Xiaoping's intervention.

bank loans. While this line of argument has its merits, avoiding political risks must be a more pertinent reason because they were related to the survival of a firm.

It is certainly an overstatement that Chinese rural industrialization could have only taken place with the rural reform because commune and brigade enterprises had already flourished before it happened. What is certain though is that the rural industrial sector would not have been as vibrant as it was had the reform not occurred. In the 1990s, a large wave of privatization occurred in the TVEs, and public ownership virtually disappeared by the end of that decade. The ultimate reason for privatization was efficiency; private ownership outperformed public ownership in this regard. Many of the TVEs were de facto owned by individuals, and privatization was partly an acknowledgement of this fact.

7.3.2 Rural Reform and Rural-urban Migration

Collective farming and restriction on migration were the two pillars of the commune system. For a long period after the introduction of the *hukou* system in 1951 till the early 1980s, specific rules guiding internal migration were developed (Zhao 2005); rural to urban migration had been virtually shut down. The rural reform destroyed one pillar of the commune system—collective farming; however, the other pillar—restriction on migration—was left intact. It turned out to be a much stronger pillar than collective farming—the *hukou* system still exists to block the free movement of people from the countryside to the city. Nevertheless, it has lost much of its bite in the last quarter century starting with the forces unleashed from the rural reform.

The most important factor boosting changes was the labor force released by the rural reform. In coastal and urban peripheral regions, people began to set up local enterprises; in more rural regions, people had to find jobs away from their home. Then came Fei Xiaotong's small town theory (Fei 2000), which advocates solving China's population problem by developing small towns. Fei's theory quickly became the central government's policy, partly because of Fei's fame and partly because it was believed that it would contain rural migration at the local level. Rural residents were encouraged to "leave the land but not the village" (*litu bu lixiang*) and "enter the factory but not the city" (*jinchang bu jincheng*). They would be rewarded with the so-called *zili kouliang hukou*—households with self-supplied grain rations—according to a State Council Circular in 1984 (Wong and Huen 1998). However, peasants lacked the enthusiasm to apply such *hukou* because it did not confer any tangible benefits upon them. In addition, in more rural areas, few small towns were capable of offering secure non-farm jobs to the peasants living in their surrounding villages. People continued to move into larger cities to find jobs.

The year 1985 witnessed the launch of new initiatives. New regulations were issued that required all migrants who had been living in an urban area for longer than six months and were above 16 years of age to apply for *zanzhuzheng*—a temporary residence

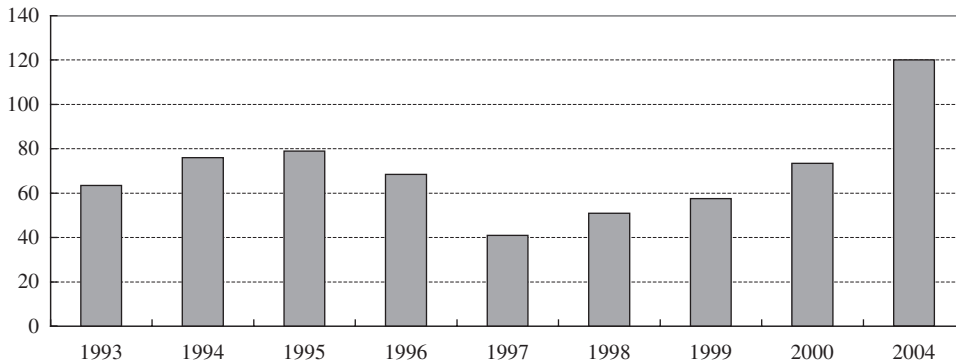


FIGURE 7.3 Rural-urban migrant workers (millions)

Source: MOA 2005.

permit (Wong and Huen 1998). The significance of issuing this permit lies in the fact that rural residents were now legally allowed to live separately from their village of origin although they were granted neither food ration nor housing allocation. The issuance of the resident identity card was another major development; for the first time, it enabled rural residents to have their own personal identity document, instead of being registered collectively. Nevertheless, rural migrants were still not welcomed in the city. The official media called them *mangliu*—blind floaters—an insulting name that vividly reflected the government's view of them.

The fast growth in the export sector of the coastal regions in the early 1990s began to draw more rural migrants out of their hometowns. By 1995, the number of rural migrants was estimated at 80 million (Figure 7.3). Government officials finally realized that migrant workers were indispensable to maintain China's fast industrial growth. Rural migrants were no longer called *mangliu*. However, they continued to be the target of arbitrary restrictions and blunt discriminations (Huang and Pieke 2003). It was after Hu Jintao and Wen Jiabao assumed power in 2003 that the migrants began to get fairer treatments. Although the *hukou* system is still in place, its role as a restrictive measure has diminished considerably.

There is a debate on whether the land tenure system after the reform has hindered labor migration. This system is characterized by egalitarian land distribution and restrictions on sale of land (Yao 2007). Some authors argue that it presents an obstacle to labor migration because the migrant cannot finance his migration by selling his land (Yang 1997). Although this argument is theoretically valid, its significance in reality remains a question. The price of agricultural land is very low. With an average landholding of one tenth of a hectare in most regions, selling one's land can hardly help one to afford buying a room in the city. On the other hand, egalitarian distribution of land may provide an insurance mechanism for

temporary rural migrants who work in the city. Since employment in the city is subject to external shocks, rural migrants face the risk of losing their jobs in the city. In that case, they can return to their villages and work on their own land. During the Asian financial crisis, 40% of the rural workers lost their jobs and had to return to their villages (Figure 7.3). If those workers did not have their own land, the unemployment scenario in the city would have been much worse. At the micro level, Li and Yao (2002) find that more egalitarian land distribution encourages temporary labor migration in a village. The mechanism that leads to this result is related to the land's role as a form of wealth that can increase a household's capability to take risk. An egalitarian land distribution system increases the propensity of migration of the poorer portion of the population, and because of decreasing risk aversion, this positive effect more than offsets the negative effect on the richer portion of the population. Hence, the net effect is greater migration in a more egalitarian village.

7.4 AFTER THE REFORM: AN OPEN-ENDED ROAD⁵

The growth of agricultural output was considerably decelerated in the second half of the 1980s although rural industry began to flourish during this period. People linked the deceleration to the inadequacy of the new land tenure system. To understand the debate, we need to take a closer look at the so-called household responsibility system or HRS. Note that the term "household responsibility system" itself is misleading because there is no contract between the family and the village stating that the family is responsible for delivering something either to the village or to the state. The Constitution stipulates that the legal owner of the agricultural land is the village collective, which comprises individual households. Therefore, it is unusual for either the village or the state to require that the households be responsible toward the village. The name HRS is nothing more than a euphemism to evade the use of non-socialist terms such as family farming. Hence, we will use the term "two-tier land tenure system" to describe the new land tenure system after the reform.⁶ By two-tier land tenure system, we mean a system in which the land rights are shared between the village collective and the individual household. The balance point can be anywhere between complete collective ownership to complete individual ownership. Considerable geographic variations exist.

7.4.1 The Two-tier Land Tenure System

Under the two-tier land tenure system, the village has become the most significant player in determining the specific form of land tenure arrangements inside a village.

5. This section draws on Yao (2007).

6. This term was first introduced by Dong (1996).

Field research consistently finds that there is a wide variety of land tenure arrangements in the Chinese villages regarding the delineation of rights, the security of rights, and the procedure to make changes (Liu, Carter, and Yao 1998; Rozelle et al. 2002). Variations in land tenure arrangements are likely to arise revolving around the following aspects.

The first is related to land distribution. The collective land ownership allows each villager to have the same level of claim on the village land. In a village with limited amount of land, the claim has significant implications on land distribution. The village needs to allocate land to newborn children and married couples in order to meet their land claim, which means that other people have to give up their land. Under this circumstance, inheritance of land is not guaranteed, and a person who permanently leaves the village may need to surrender his/her land to the village. The possibility of land redistribution gives rise to the problem of tenure insecurity that is recognized in the literature to lead to certain inefficiency.

The second aspect concerns farm households' use rights. Generally, individual households can decide what to sow in their fields and are the sole residual claimants. The State enforced grain purchasing quotas on household outputs. In most of the cases, the quota prices were lower than the market prices. For an average farm household, the amount of quota was between 10%–20% of its total grain output (Liu, Carter, and Yao 1998). Beyond the quota, the household could sell its grain surplus in the free market. In 1993, the quota system as well as urban food rationing was abolished.⁷ Nevertheless, the government has still maintained official purchase of grains. In recent years, the official purchasing prices were even higher than the market prices because the government wanted to raise the incomes of peasants.⁸

However, the peasants' use right is not completely free of infringement by the local government. In some localities, peasants are forced to plant certain cash crops because the local government can then collect agricultural special product tax. The mixed ownership of the two-tier land tenure system might have provided the local government with a sense of legitimacy to order the peasants to plant certain types of crop. However, this is only a guess because the local government's behavior is illegal in the sense that it is neither consistent with the central government's policy nor conforming to the Constitution.

The third aspect is the transferability of land. The two-tier land tenure system entails restrictions in this aspect. The most significant restriction is that land selling is prohibited. Inheritance is only partially granted—a peasant can pass his land to his offspring

7. However, following the inflation that began at the end of that year, parts of the food rationing system resumed in several cities. However, they were abolished again as soon as the inflation abated.

8. This practice was set in place in the period 1998–2000. It stimulated high growth of grain output, which has since become a burden for the central government. It is estimated that the potential loss due to excessive grain storage was between RMB 300 and 400 billion.

if no reallocation is called upon in the village. Land leasing was restricted in the beginning; however, it is now allowed, and with about 5%–10% of the land and households involved, its activity has reached the international average.

The last aspect concerns peasants' rights regarding the conflicts between them and the State. A significant flaw in the farm household's disposal right emerges when a government-sponsored land development project needs to use the household's land. By law, the household has to give up its land; the problem is with the compensation that the household obtains. In a typical land development project in a suburban area, the farm household can get a maximum of 20% of the market value of the land. Conflicts arising from government-sponsored land development projects have been a major concern for the government.

In summary, under the two-tier land tenure system, the farm household's land rights are likely to be incomplete. While conventional wisdom believes that such a system hurts economic efficiency, some authors argue that it is the second best choice under multiple market failures. Next, we discuss the implications of the two-tier system on agricultural productivity.

7.4.2 Land Tenure and Productivity

Periodic redistribution of land under the two-tier land tenure system creates uncertainty in peasants' rights to their land. Insecure land tenure is similar to a random tax levied on a peasant's land investment because there is a risk that the peasant would lose his land in the future; hence, he will reduce his investment (Feder 1985; Besley 1995), and this will negatively affect agricultural productivity. In theory, therefore, there is no doubt that the two-tier land tenure, similar to the indigenous tenure in other developing countries, discourages land investment. The problem is the significance of the negative effect.

Studies have found some positive effects of securer land tenure. Yao (1998) finds that in two rice provinces, Zhejiang and Jiangxi, securer land tenure—defined by a synthesized indicator that reflects the frequency of land reallocations and the prospect of a land reallocation in case of a demographic change—increases peasants' incentive to plant more manure weeds in the winter. However, the impact of securer tenure on land productivity is low. A reduction of one reallocation in a 10-year period would imply a 5% increase in output. Li, Rozelle, and Brandt (1998) and Jacoby, Li, and Rozelle (2002) also find similar results. However, a potential problem associated with these results is that land reallocations are endogenously determined. In particular, peasants may use investment to establish *de facto* land rights and force the village to reduce land reallocations; therefore, the estimate of the tenure security effect is biased upward. Because the “two no's” policy in Guizhou Province was imposed on villages from above, the province would have served as a natural testing ground for the tenure security effect. Unfortunately, a recent study finds that peasants in Guizhou do not invest significantly

more, if not less, than the peasants in the two neighboring provinces with similar geographic conditions (Bauhoff and Yao 2002).

The insignificant contribution of securer tenure on land investment may arise as a result of the specific arrangements made by the village in the process of land reallocation. First, villages may choose the type of land to be reallocated. For example, it is found that villages in Hunan and Yunnan reallocate low-value dry land but do not reallocate high-value rice paddies (Bauhoff and Yao 2002). In addition, villages may also avoid reallocating land with significant land investment such as wells. Second, it is found that in some areas, land investments are compensated when land is reallocated. Third, many villages set aside land to prepare for population increase so that they do not need to take land from farm households when the new population requires land. All these arrangements mitigate or even eliminate the negative effect of the two-tier land tenure.

Even if securer tenure encourages land investment, its effect on agricultural output is likely to be limited. This is because as compared with other agricultural inputs such as land, labor, and fertilizers, land investment plays a minor role in agricultural production. Nevertheless, the lack of long-term investment may hurt the sustainability of the Chinese agriculture system although there is no direct evidence showing this long-term negative effect. On the other hand, an international and historical comparison of soil quality shows that China's soil quality improved in the last half century. This is because the high population pressure forces the country to improve on its land. In other words, the effect of factor endowments eventually dominates people's decisions regarding their investment in land. Taking this view as granted, the negative effect of insecure land tenure should not be a concern of first-order importance in the long run.

On the other hand, some are of the opinion that the current land tenure is an impediment to land consolidation. Land consolidation and large farms have long been emphasized even if there is no evidence showing that large farms have higher profit margins than small farms. The following are the frequently mentioned reasons for supporting large farms.

First, it is believed by many people, particularly non-economists, that there is scale economy in agriculture. This reason can be readily rejected because the agricultural sector has the smallest scale effect (if any) primarily because of the divisible nature of its inputs. People have arrived at the elusive scale effect by casually comparing Chinese and US farms in terms of their labor productivity, which of course is not suitable for assessing scale economy.

Second, it is believed that it is easier to introduce modern inputs, especially large machineries, into large farms than into small farms. This assessment is correct; however, the question is whether mechanization is the appropriate goal for Chinese agriculture. Yet, mechanization was proposed in the 1970s as the central component of China's agricultural modernization. Although agricultural modernization is no longer

a policy goal, agricultural mechanization is still regarded as a symbol of modern China. However, in terms of China's abundant agricultural labor resources, mechanization can hardly be the goal for China in at least the next 30 years.

Third, farm consolidation is proposed as a means to increase farm income. However, this proposal misses the point: While the income of the larger farms will increase, the consolidation will inevitably leave other peasants landless. Unless the non-farm sector is large enough to quickly absorb the redundant agricultural labor, land consolidation can only increase the income of some peasants at the expense of other peasants. It is highly unlikely that China's industrial development will quickly absorb the redundant agricultural labor force. Therefore, the proposal for raising farm income through farm consolidation is not a sensible one.

Fourth, since China's accession to the WTO, a popular belief is that China cannot compete with foreign agricultural imports with its small farms, so farm consolidation is a prerequisite for the survival of Chinese agriculture. Indeed, if China insisted on competing with land-rich countries in land-intensive products such as wheat and corn, China would certainly lose. However, this is not because China's farms are small, but because the nature of the crops and China's land and labor endowments determine that China does not have a comparative advantage in these crops. Land is relatively more important than labor in the production of these crops, so land-poor countries have a comparative disadvantage in planting these crops. From this point of view, China should not compete with foreign imports in land-intensive products; instead, it should shift toward producing more labor-intensive products. Small farms actually have an advantage over large farms in their production because family labor is cheaper.

However, in practice, farm consolidation is implemented in some localities. For example, villages in southern Jiangsu Province have taken back land from households and handed over the cultivation of the land to a specialized farm team whose members are paid by cash wages. These villages have a relatively large non-farm sector and many people do not wish to work on their land. However, the sustainability of such semi-commercial farming is in question. The special farm team tends to use more machinery and other modern inputs, so its cost is very high. In many cases, it is subsidized by the village.

In the early 1990s, farm consolidation was widely adopted throughout the country. Some local cadres took this opportunity to exploit the peasants. For example, a common practice called "the two-field system" gave the household a small fixed amount of land, the so-called food land, for free and auctioned out the remaining land, the "responsibility land," on a for-fee basis. Because land was a necessary means of production for many households, bidding for the responsibility land was very competitive, and in many cases, the auction extracted all the potential profits from the household. This

increased the resentment among the peasants and finally caught the attention of the central government, who ordered an end to the two-field system.

Realizing that administrative farm consolidation hurts peasants' interests and freedom, some authors turn to the market in search of a solution. It is argued that the land sales market helps farm consolidation and improves efficiency because there is a tendency that land will be concentrated in the hands of those who have an advantage in farming. However, it is an empirical question whether the land market can achieve farm consolidation because the success depends on the distribution of individual value of land. Farm consolidation is only possible when the distribution is highly polarized. One circumstance that leads to this kind of distribution is when there is a natural disaster that has varying implications on households depending on their coping abilities. Another circumstance is when a large portion of the population obtains employment outside agriculture. However, the Taiwan experience shows that people tend to keep their land even if they move to the city. The speculation that the land value would increase prevents people from selling off their land. This could be true in the fast-growing suburban areas in mainland China. Non-farm employment is growing in those areas, but the speculation of rising land prices also grows. As a result, it is highly unlikely that farm consolidation will occur rapidly.

7.4.3 An Open-ended Road

High person/land ratio is and will be a reality for Chinese agriculture in the foreseeable future. In 1978, 18% of the Chinese lived in the city; in 2007, that figure increased to 43%. This second figure includes registered rural migrants living in the city. This means that China's urbanization rate has been increasing by about 0.9 percentage points each year in the last 30 odd years. Even if we assume a higher rate, say 1.2 percentage points, the percentage of the population living in the cities in 2030 will only be about 70% of China's total population. But by that time, China's population will be stabilized at 1.5 billion, which means there will still be 450 million people living in the countryside. If, and this is a big if, we assume that we can maintain China's arable land at 2 billion *mu*, each rural resident will only be able to own 4.4 *mu* of land, which will certainly not be enough to sustain the average person's livelihood at that time. Part-time farming will be as prevalent as it is today. This is not an ideal picture for those who want large farms; however, the reality will not be better than that—Chinese agriculture is and will be a small-farm economy.

It is important that we keep this long-term trajectory in mind while discussing Chinese land tenure and agricultural policy. We admit that the current land tenure is imperfect and hinders agricultural efficiency to some extent; however, we also need to weigh the efficiency loss against the social and macroeconomic functions that the current land tenure brings. At the very basic level, the egalitarian nature of the current land tenure

Table 7.6 Welfare indicators in China and India in 1990

	China	India
GNP per capita (US dollars)	410	370
Daily calorie supply (Cal.)	2,630	2,238
Children 0–5 below –2 s.d. weight for age (%)	17.4	63.9
Children 0–5 below –2 s.d. height for age (%)	31.4	62.1
Infant mortality (/1,000)	31	97

Source: Burgess 2003, Table 1.

alleviates the malnutrition problem of the poor households. Burgess (2003) compares China and India in terms of several welfare indicators (Table 7.6) and attributes China's better performance to her more egalitarian land distribution. His argument relies on land's own price effect. When the food market is perfect, land only has an effect on a household's consumption by increasing its income. When the food market is imperfect; that is, when food supply is sometimes blocked for some reason (draught, flood, or geographic isolation), land serves as a cheaper device for households to generate food consumption. Burgess calls this latter effect "the own price effect of land." Land is a cheaper device because farm households' labor is cheap and more of it would be applied on land when the outside food market is not perfect. Burgess's econometric analysis on the data from Sichuan and Jiangsu Provinces verifies the existence of land's own price effect.

To the extent that a farm household with average landholding can enjoy a reasonable nutrition level, egalitarian land distribution helps alleviate the malnutrition problem of the poor households. In this case, the two-tier land tenure system has a built-in mechanism to alleviate extreme poverty. In inland China, most farm households are living at the subsistence level, with most of their nutrition needs covered by their land. Unequal land distribution thus deprives the households with small amounts of land of the basic means to make a living, which can hardly be tolerated by the traditional Chinese collective culture.

At the national level, the current land tenure serves as a stabilizer for the economy and society. As we pointed out in the previous section, because farmers owned their land, the large number of unemployed migrant workers created by the Asian financial crisis did not lead to a social problem. Currently, only 40% of the urban residents have social security coverage. The number is much lower in the countryside. It will take another 10 to 20 years for China to build a complete social security network that would cover a majority of the citizens. There is no doubt that the countryside will be the last part of country to reach that goal. Between now and the time that a social security networks built, the egalitarian land tenure system will serve as a substitute to guarantee basic nutrition intake in the countryside.

There certainly exist huge variations across the country. Rural residents in the coastal regions are quickly catching up with their peers in the city; some of them even enjoy higher living standards than the average person in the city. However, for the vast majority of peasants living in central and western China, life is still not comfortable. There are still several dozen million people living under one dollar (in PPP terms) a day. In accordance with this huge disparity in living standards, there are also large variations in land tenure arrangements. In coastal regions, land has been increasingly consolidated for industrial uses; rural residents live on rents generated by their land rather than on agricultural production. In cases where farming is still preserved, land is usually rented out to outsiders by the village. In most parts of the country, various forms of family-village mixed ownership of land prevail. Some villages still adjust land distribution while others (particularly those in Guizhou Province) have stuck to fixed landholding for years. Similar to the initial stage of rural reform, there are many ongoing experiments throughout the country. A lesson we learned from the reform is that respecting peasants' choices is better than centralized commands. Peasants will determine the best way forward in keeping with their local conditions. Convergence will be reached as local conditions become less local, possibly by more integration of the village economy into the national economy and more reliance of peasants on outside opportunities. Leaving the road open is the best way to ensure such a convergence.

7.5 CONCLUDING REMARKS

China's rural reform was made possible by two reinforcing elements—innovation at the grassroots level and changes in the ideology of the CCP. Innovation at the grassroots level was driven by the need for sufficient food in the initial stage and more material gains in the later stage; changes in the ideology of the CCP were made possible by the pragmatism held by the moderate section of the party. The convergence to family farming was facilitated by the nature of the reform as a Pareto-improving institutional change. The success of rural reform has served as both a catalyst for further changes in the countryside, particularly the development of the TVEs, and a large wave of rural-urban migration.

From the academic point of view, this chapter provides a case study on how institutional change is made possible by the interplay of decentralized local experiments and ideological changes of the agent who controls institutional change. The view of institution as a set of equilibrium behavior is too static to explain institutional change. This chapter treats institutional change as the consequence of ideological discontinuity. The general message is that the interplay between human cognition and society is a driving force for institutional change.

CHAPTER
8

Enterprise Reform: Managing Ideology

The public ownership of enterprises is one of the two central pillars of Stalinist socialism, the other being the state planning of product quantities and prices. The followers of orthodox Marxism believe that a planned economy but not public ownership can be sacrificed; this is because in their opinion, public ownership is the guardian of the primary goal of socialism, which is to establish a society free of exploitation and inequality. In their opinion, private ownership inevitably leads to the exploitation of the worker by the owner. Some people try to defend public ownership from the efficiency point of view believing that state-owned enterprises (SOEs) do not perform worse than private firms. For example, Lin, Cai, and Li (1999) believe that the inferior performance of the SOEs is not due of the lack of incentives; rather, it is because the SOEs have to foot the burden of the government's goal of catching up with the developed world by adopting technologies that China's comparative advantage allows for. People also cite the performance of Citron, a government-owned French auto manufacturer, as proof that SOEs can at least perform as well as private firms.

However, defending public ownership for the sole reason of preventing exploitation indicates a flaw in the understanding of the relationship between the market and private ownership. If one admits that the market is better than planned resource allocation, as most defenders of public ownership believe, then admitting remuneration based on the marginal product of each input, including labor, is inevitable, even when firms are publicly owned. This is because otherwise, the market will not clear; that is, market supply will not be equal to market demand. However, the scenario in a market with private ownership is exactly that of remuneration based on the marginal products of inputs. That is, workers in the market get the same wage irrespective of whether the firms are publicly or privately owned. On the other hand, the owner of the capital also gets what the marginal product of capital permits. Both workers and capital owners are

paid in a procedurally fair manner as long as one believes that the market is the best way to allocate resources. Of course, there are people who also reject markets. However, the painful history between 1949 and 1978 shows that a planned economy with public ownership does not work for China. No one, including those advocating public ownership, would want a complete return to that period.

On the other hand, defending public ownership on the basis of efficiency is also flawed when it is confronted with reality. From a purely theoretical perspective, a public firm can perform as well as a private firm as long as there exists one government agency that is seriously committed to exercising the ownership rights on behalf of the public. However, this kind of clear-cut governance structure is seldom found in China. The chain of responsibility is broken in places by various irregularities in the political as well as bureaucratic systems. Similar to the rural reform, enterprise reform was also a bottom-up process. Local governments were directly affected by the inefficiency in their SOEs and realized that privatization was the only way out.

If we do not take ideology into consideration, the Chinese government had to face two even more pressing problems in the process of privatization. One was massive unemployment and the other was the loss of the SOE assets to private hands. Although studies find that unemployment is not linked to privatization (Huang and Yao 2007), intellectuals as well as the general public believe that privatization is the cause of massive unemployment. Workers were the CCP's traditional power base; it was a serious challenge for the CCP to move privatization forward without alienating itself from the workers. On the other hand, the loss of SOE assets, mostly in the form of underpricing the value of assets, did occur in the privatization process. However, reality was much more complicated. In many cases, underpricing was offered by local governments in exchange for the new owners' consent to retain more workers. In addition, the lack of an open and competitive market was also responsible for this state of affairs. The central government adopted a "do-it-but-don't-talk-about-it" strategy toward flooded criticisms from the general public and intellectuals, hoping that the better performance of privatized SOEs could assuage public resentment. This strategy has largely worked because the din of criticism lowered as SOE privatization approached its end by the mid-2000s.

The SOE reform provides a good example of the interplay between reforms at the grassroots level and ideological shifts at the central level. It shows how decentralization has given local governments the incentive to improve firm efficiency through institutional innovations and how the shifts in ideology at the central level have helped to sanction and promote those innovations. In this chapter, we will first provide a short review of enterprise reform and then discuss the impacts of privatization on firm efficiency in Sections 8.1 and 8.2, respectively. Subsequently, in Sections 8.3 and 8.4, we will

move on to discuss the two most challenging issues in the process of privatization—unemployment and loss of the SOE assets—and describe the government’s strategies to cope with them. Section 8.5 concludes the chapter.

8.1 A BRIEF HISTORY OF ENTERPRISE REFORM¹

Enterprise reform started in 1984 when the central government, encouraged by the huge success of the rural reform, decided to launch reforms in the city. Although there were calls for privatizing the SOEs, the government’s emphasis was initially on boosting performance by changing the SOEs’ internal governance through contracting. Contracting was believed to be a reform within the realm of socialism, and privatization was too radical to try at that time. The success of the rural reform gave the new leadership of the early 1980s confidence that contracting would work for SOEs, just like *dabaogan* had worked for peasants. As the saying went—*yibao jiuling* (it works as long as you contract out). The new premier Zhao Ziyang, in particular, believed in contracting because *baochan daohu* in Sichuan, where Zhao had served as the party secretary before he was promoted to the center, proved to be a huge success and eventually propelled him to the post of premier.

In a typical contract, an SOE manager signs a contract with the local government that owns the SOE. The contract specifies certain targets for sales, profitability, capital accumulation, and so on; in return, the manager gets a share of the profit or a fixed amount of reward. Empirical studies (e.g., Groves et al. 1995; Li 1997) find that contracting did enhance the incentives received by the manager and improved firm performance. The main problem with contracting was that managers were rewarded for their successes but not justly punished for their failures. There were two important differences between SOE contracting and *dabaogan*. The first was that peasants became the sole residual claimants of what they had produced, whereas SOE managers were only partial residual claimants at best. In other words, peasants had a fixed rent contract with the State—“fulfill the quota to the State leave enough to the collective, and the rest is mine”—but SOE managers had, at best, a sharing contract with the State. According to the classical argument in contract theory, peasants had more incentives than the SOE managers. Partly related to the different nature of the two kinds of contracts was the second difference between SOE contracting and *dabaogan*—while a failure could mean a life-or-death situation for a peasant, the State was always ready to come to the rescue when an SOE failed because the State’s assets and many people’s jobs were at stake. In other words, the budget constraint that a peasant faced was difficult, but the budget

1. This section draws on Yao (2004d).

constraints that an SOE manager faced were mild. The lack of an ultimate punishment for failures rendered contracting a half-way reform that could not solve the incentive problem in the SOEs.

By the end of the 1980s, the government moved one step forward by deciding to lease out the small SOEs to managers. In May 1998, the State Council issued a regulation on the leasing of small SOEs.² A key difference between leasing and contracting was that in a lease, the manager and his/her team became an independent operator and the only relationship between them and the government was that they leased the assets of the SOE for their own production. This made SOE managers more like the peasants, who in theory, could lease their land from the village in *dabaogan*. The first significant lease contract was signed in the Wuhan Motor Engine Factory in 1986, when three persons put up RMB 34,000 as collateral to lease the factory. A direct consequence of lease contracts was that managers could be recruited from outside the enterprise. In many cases, leasing led to the privatization of township and village enterprises (TVEs). In a lease contract, new capital that accrued to the enterprise belonged to the leaser. After several years, this part of the capital would outweigh that of the original enterprise, and the leaser would become the effective owner of the enterprise.

In addition to contracting and leasing, other reform measures that would potentially lead to privatization were also adopted. Among them, incorporation was the most significant. Initially, the government restricted incorporation to the SOEs themselves. However, private shares soon appeared. The first case of private shares was seen in three Guangzhou SOEs in 1986. In those three enterprises, employees bought 30% of each enterprise's total assets. The first case of incorporation of a large SOE was in August 1988 when Shengyang Motor Corporation was transformed into Shengyang Jinbei Motors Inc. by issuing shares to the general public.

The opening up of the Shenzhen Stock Exchange in 1990 and the Shanghai Stock Exchange in 1991 enabled the SOEs to issue shares to the public. However, the Chinese government ensured that it would not lose control of the listed SOEs by requiring that a proportion (usually more than 50%) of the state's shares in the firm could not be circulated. Because of this restriction, the two stock markets served mostly as a platform for privileged SOEs to obtain cheap finance than a place for privatization or strengthening the SOEs' corporate governance.

Serious privatization started only after Deng Xiaoping's visit to southern China in 1992. As in the case of the rural reform, privatization also started at the local level and was later sanctioned by the central government. The most important impetus for

2. "Tentative Regulations on the Lease of Small State-owned Industrial Enterprises," State Council, May 20, 1988.

privatization was the large amount of debt built up in the state sector. The level of debt was a more pressing problem in small cities. For example, in Zhucheng City, Shandong Province, 103 of the 150 city-owned SOEs were in the red at the end of 1992, with losses amounting to RMB 147 million—equivalent to the city government’s revenue over 18 months (Zhao 1999). The government of Shunde County, Guangdong Province, also encountered a debt problem when it first started privatizing its SOEs in 1992. Several of its newly built SOEs realized that their technologies were already rendered obsolete by competition when they began to produce. Their operation was in deep debt from their inception. In the words of the local officials, the SOEs were “bleeding”—public money was being wasted in senseless investments (Yao 2000). However, over-investment served well for the SOE managers. For one thing, they could get kickbacks from the contractors; for another, over-investment brought in government money to keep the firm floating and to disguise its losses; on a third count, over-investment made the managers look “pretty” and increased their leverages in local politics. However, the government suffered and felt the pain. Cities like Zhucheng could not withstand the constant subsidies to failing SOEs. They faced tough budget constraints and needed to find a way to get rid of their burdens. It was found that privatization was the ultimate way out.

Early birds like Shunde and Zhucheng definitely faced political risks by privatizing their SOEs. Deng Xiaoping’s tour to the south opened the door for further reform, but giving up public ownership was still a political taboo at the time. Large waves of privatization only began after 1995 when the central government issued the policy of *zhuada fangxiao* or “keep the large and let the small go.” This policy was developed after extensive studies led by the then vice premier in charge of industry, Mr. Wu Bangguo.³ The government had a good reason to implement this policy. In 1997, 500 largest state firms had 37% of the assets held by state industrial firms and contributed to 46% of the tax collected on all state firms and to 63% of the total profit in the state sector. On the other hand, the performance of smaller firms owned by local governments was worse than that of those owned by the central government. In 1995, 72.5% of the local firms as opposed to 24.3% of the central firms were in the red (Zhao 1999). “Control of the (500) largest firms means we have control of the largest chunk of the state economy.”⁴

From the “let the small go” part of the policy came the term *gaizhi*, which means “restructuring the system.” In many cases, it was a euphemism for privatization. In fact, privatization has never appeared in official documents. Privatization was initially more popular in the countryside. From 1993 onward, many localities, including Shunde and

3. In 1994, as the ministry in charge of the government’s economic affairs, the State Economic and Trade Commission sent the report *Suggestions on Revitalizing Small State-owned Enterprises* to Wu Bangguo. In September 1995, the policy was formerly announced by the central committee of the CCP in one of its plenums and was suggested for the ninth five-year plan.

4. Wu Bangguo’s speech at the national conference on economy, December 20, 1997. Quoted in Zhao (1999).

southern Jiangsu that had been renowned for their development of the collective economy began to implement massive privatization. The TVEs used to have vaguely defined property rights that did not clearly define whether the entrepreneur or the government, or both, owned the enterprise. Due to their marvelous growth records, the TVEs have been hailed by some authors as posing a challenge to the neoclassical doctrine of clearly defined ownership (e.g., Weitzman and Xu 1994). However, as the TVE growth slowed down, the disadvantages of their vaguely defined property rights were acknowledged by researchers. Similar to their urban counterparts, the SOEs, the TVEs also suffered from the soft-budget problem (Zhang 1998). Local governments foresaw the problem even earlier because they footed a considerable amount of the debts accumulated by their TVEs' non-performing loans. In addition, many of the TVEs were the so-called red hat firms; that is, firms that were nominally owned by local governments but actually owned and operated by private owners. Those owners wanted to wear a red hat—government ownership—because they were afraid of political risks. After all, private ownership of factories was only formally acknowledged by the government in 1988 in the *Regulations on Private Firms* issued by the State Council. When privatization started, many of those red hat firms simply took off their hats.

In the cities, the restructuring process began in the mid-1990s and experienced two waves. In the first wave, it followed the initial model adopted by Shunde and Zhucheng; that is, to create employee shareholding firms. However, Shunde and Zhucheng quickly initiated the second wave of the restructuring process that abandoned the old model and adopted a new model of share concentration or management buyout. By the end of the 1990s, a consensus was reached that the restructuring process had to allow the management to own the majority share in order to truly transform the enterprise. Therefore, some forms of management buyout became the major models in the second wave of the restructuring process and spread to very large firms, such as the SOEs listed on the stock market. Privatization was accepted as the key to enterprise reform, and “the State retreats and the private moves forward” became the *gaizhi* slogan in many cities.

A national survey conducted in 1998 showed that one fourth of the approximately 87,000 sample SOEs had adopted the *gaizhi* process and another one fourth were planning some measure of restructuring prior to the survey. Among the restructured firms, 60%–70% followed partial or full privatization.⁵ Another national survey conducted in 2002 on a slightly different sample showed that 86 of the industrial SOEs had adopted the *gaizhi* process by the end of 2001. Again, about 70% of the restructuring cases were those of partial or full privatization.⁶ That is, 60% of the industrial SOEs were par-

5. Unpublished report by the National Bureau of Statistics.

6. Unpublished report by the State Economics and Trade Commission.

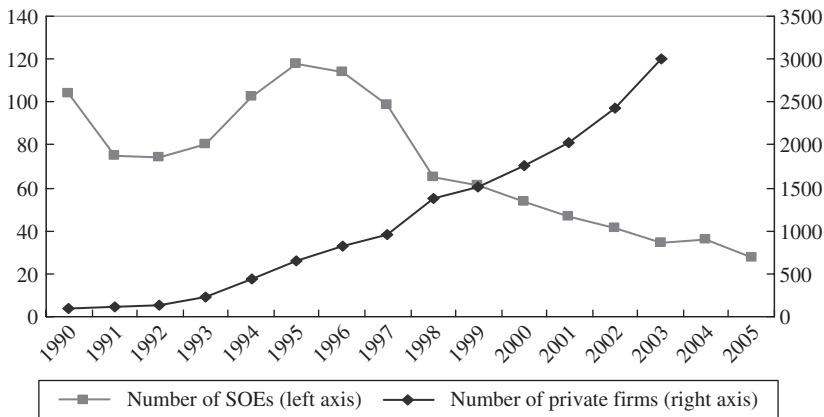


FIGURE 8.1 Number of SOEs and private firms in the industrial sector (1,000)

Sources: NSB 1990–2004.

tially or fully privatized by the end of 2001. The fieldwork of an International Finance Corporation (IFC) project showed that of the six cities interviewed, three planned to complete the restructuring process at the end of 2003 (Garnaut et al. 2005). In addition, the survey showed that the ratio of partial or full privatization had increased to about 85% in more recent years. Nationwide, the number of large and medium-sized SOEs reached the highest at 113,837 in 1996 (Figure 8.1), but then decreased sharply. By the end of 2004, only 27,477 SOEs remained, less than one fourth of those in 1996. The SOEs that had disappeared had been either been privatized or become bankrupt.

Guo and Yao (2005) identify five theories for the causes of privatization in China. The first theory is the efficiency hypothesis. North and his colleagues (e.g., North and Thomas 1973) define this hypothesis as implying that institutions evolve to explore economic gains. In the context of privatization, Shleifer and Vishny (1994) argue that political games may lead to efficient privatization. The second theory is the market liberalization hypothesis. Market liberalization reduces the government's contribution to local SOEs, so the government's incentive to privatize them increases (Tian 2001). The third theory emphasizes the role of the hardened budget constraint when SOEs deal with the bank. When the budget constraint is hardened, local governments lose a way to finance their goals through the SOEs so they opt for privatization. We call this theory the soft-budget hypothesis. The fourth theory is related to the financial position of the local government. In one way, privatization can generate revenues for the government; in another, it can serve as a tool for the government to get rid of the burden of loss-making SOEs. In China, the second scenario dominates; hence, we call this line of theories the financial

liability hypothesis. All the above four hypotheses are concerned with the motivation of privatization; however, privatization also faces serious constraints even if a local government is willing to privatize its SOEs. Excessive debts and redundant workforce are often the two most important obstacles to a firm's privatization in China (Garnaut et al. 2005). We refer to this last hypothesis as the constraint hypothesis.

Guo and Yao (2005) find that the most robust theory is the constraint hypothesis; that is, privatization is hindered by excessive debts and worker redundancy in the SOEs. However, a more detailed study reveals that these two factors are not so much a constraint to privatization in their own right; rather, they are probably used by the new owners and employees as a bargaining leverage to press for a better deal with the government. Except for a few occasions, soft budget constraint with the bank is found to significantly retard privatization. When compared across provinces, the extent of market liberalization of a province increases the chances of an SOE being privatized. This positive effect of market liberalization is found to be more robust in the earlier years of privatization. In contrast, the efficiency hypothesis receives very weak support and the liability hypothesis receives no support.

The finding that market liberalization increases the chances of SOE privatization is consistent with the theoretical and empirical work of Li, Li, and Zhang (2000). Market liberalization opened the door to private firms whose competition exposed the SOEs' weaknesses in corporate governance and provision of incentives. In contrast to the sharp decline in the SOEs since the mid-1990s, Figure 8.1 shows a dramatic increase in the number of private firms during the same time. The number of private firms increased from less than 10,000 in 1990 to more than a million by 2004. Note that here, a number of private firms use the narrow definition of what constitutes a private firm; that is, firms that are registered as sole proprietor firms. A broader definition of private firms would also include companies and partnership firms whose shares are held by individuals or other private firms. In addition, there also exist collective firms that are neither SOEs nor private firms but are owned collectively by the employees. These firms should also be regarded as private firms.

Given this discussion, we can now match the process of SOE privatization to our theory developed in the first part of the book. It is clear that SOE privatization was pushed forward by the interplay between local experiments and the revision of ideology at the central level. The reform started with internal contracting and then quickly moved to leased contracts in the later part of the 1980s. Privatization started in 1992 after Deng Xiaoping paid a visit to the south and called for continuous reform. It was a bottom-up reform and began in localities such as Shunde and Zhucheng, where a vibrant private economy posed a serious challenge to the survival of the SOEs. Local governments in these localities felt acute financial pressures due to the poor performance of their SOEs.

Decentralization allowed them to take bold moves to test the boundary of the existing ideology and its corresponding institution of public ownership. The positive results of these experiments to increase firm efficiency and reduce government burden caught the attention of the central government, who then tried to make sense of the experiments by revising the operational part of its ideology. The policy of *zhuada fangxiao* shrank the boundary of public ownership and led to a wave of privatization in the mid-1990s. There were two significant debates about unemployment and loss of state assets in 1998 and 2004, but the positive results from the field bolstered the proponents of continuous privatization. We will provide some assessments of these two debates in the next three sections when we discuss the efficiency implications of privatization and the issues of unemployment and loss of the SOE assets.

8.2 PRIVATIZATION AND FIRM PERFORMANCE⁷

The success of privatization has to ultimately withstand the efficiency test; that is, whether or not privatization has improved firm efficiency. However, how to measure firm efficiency and which sample of firms to use are challenging issues. In the 2004 debate, Xianping Lang used the SOEs listed in Hong Kong to argue that their performance was not worse than that of the private firms (Li 2006). However, we all know that the SOEs are large firms with considerable monopolistic power in their respective industries. A biased sample distorts the overall comparison between SOEs and private firms. In this section, we rely on a sample of 683 firms drawn from 11 cities to gauge the impacts of privatization on two aspects of firm performance—financial discipline and efficiency. This sample was from an IFC 2002 survey for which this author was one of the principal investigators. The survey was specifically designed to determine the pace and forms of restructuring and its impacts on firm performance in terms of employment, asset management, corporate governance, employment, and profitability. In addition to the information on restructuring, the survey also collected firm accounting data for the period 1995–2001. The locations of the 11 sample cities were chosen to cover cities with different geographic and economic characteristics. From north to south, they were Harbin, Fushun, Tangshan, Lanzhou, Weifang, Xining, Zhenjiang, Huangshi, Chengdu, Hengyang, and Guiyang. Some of them are provincial capitals and large cities; others are medium-sized cities.

All the 683 firms were SOEs by the end of 1995, but some of them underwent restructuring or privatization in subsequent years. However, the survey oversampled the non-restructured SOEs in its implementation stage because those SOEs had closer

7. This and the next two sections draw heavily from Garnaut, Song, and Yao (2006).

Table 8.1 Dynamics of privatization: 1995–2001

Year	Private Shares (%)	Private shares held by			Firms with private shares (%)	Among which	
		Management	Employees	Outsiders		Private shares (%)	Privately Controlled (%)
1995	3.5	0.0	0.5	3.0	6.8	54.6	52.0
1996	4.2	0.1	1.0	3.2	7.8	55.6	51.7
1997	5.5	0.5	1.3	3.8	10.8	53.2	48.7
1998	9.4	1.2	2.5	5.6	16.3	59.5	55.2
1999	14.3	2.7	3.8	7.9	22.9	64.0	59.5
2000	23.9	6.9	7.5	9.6	33.7	72.2	70.7
2001	33.0	10.0	9.9	13.1	43.6	76.6	75.2

Source: New sample of 387 firms.

ties with the government agency that implemented the survey in each city. In order to ensure a random sample, we re-sampled the SOEs so that their proportion in the sample matched that in each city resulting in a sample of 387 firms. Details of re-sampling can be found in Garnaut, Song, and Yao (2006).

Table 8.1 shows the dynamics of privatization in the new sample of 387 firms. Privatization occurred at a rapid pace in the sample period 1995–2001. Average private shares increased from a mere 3.5% in 1995 to 33% in 2001. Accordingly, the percentage of firms with private shares increased from 6.8% to 43.6%. The pace of privatization accelerated starting in 1999, the year when the second wave of privatization began to spread throughout the country. Among the three parties—the management, employees, and outsiders or private firms—that held private shares, the outsiders were the most significant player dominating the other two in all years. By the end of 2001, 13.1% of the shares were held by outsiders. This trend is encouraging as studies on other transition countries have shown that in improving the efficiency of privatization, outsider participation plays a more significant role than insider participation (Djankov and Murrell 2002). Shares controlled by employees increased at the same pace as those controlled by the management. By 2001, the two parties held almost the same number of shares on average. Among the firms with private shares, both the number of private shares and the number of firms controlled by private shares (private shares are more than 50%, inclusive) increased during the survey period. By the end of 2001, 76.6% of these firms' shares were owned by outsiders, and 75.2% of the firms were controlled by private shares. This shows that as long as it was privatized, a firm tended to be increasingly controlled by private shares.

8.2.1 Financial Discipline

Financial discipline is an important issue for SOEs because soft budget constraint was one of the most serious problems that plagued the SOEs in the previous planned economies. According to the classical analysis of Kornai (1980), soft budget constraint arises as a consequence of the state's paternalistic behavior toward the socialist firm; therefore, it is expected that restructuring, and privatization in particular, will alleviate the problem. However, soft budget constraint can also exist in a capitalist economy due to the failure of the bank and the State to commit to a time-consistent policy (Dewatripont and Maskin 1995). Therefore, it is an empirical question whether restructuring and privatization can improve a firm's financial discipline. In this section, we compare restructured and privatized firms with the old-style SOEs in terms of three financial indicators: bank debts, taxes, and social security. The first indicator reflects the firm's relationship with the bank, and the other two reflect its relationship with the government. The soft budget constraint problem arises when a firm is able to postpone its due payments to the bank or the government. We will now study overdue bank debts (overdue bank loans and interest added up together), overdue taxes, and overdue social security.

Table 8.2 compares the restructured firms with the non-restructured ones in terms of the above three indicators. The first three columns of the table show the percentage of firms with overdue payments, and the last three columns show the average amount of overdue payments weighted by proper denominators. It is evident that a smaller number of restructured firms rather than the non-restructured ones owed overdue bank debts, and the average size of their debts was smaller than those of the non-restructured firms. However, this better discipline of the restructured firms may be a result of the reduction in their bank and other debts during the year of restructuring. It is widely suspected that firms use restructuring to evade debts. Nevertheless, only 8.3% of the restructured firms in our sample reduced their bank debts, and only 13.6% of them reduced any form of debts in the year of restructuring. Therefore, the better performance of the restructured firms was unlikely to be a result of debt evasion in the year of restructuring. Restructuring has indeed hardened the budget constraint of firms with the bank. It has also improved the budget constraint of firms with the government, but to a much lesser extent. A smaller number of restructured firms owed taxes to the government, and the average size of their overdue taxes was smaller. The advantage of restructuring was less clear in the case of social security. The percentage of restructured firms with overdue social security did not significantly differ from that of the non-restructured firms, and the average size of their overdue social security was even larger than that of the non-restructured firms.

Table 8.3 compares privatized firms with fully state-owned firms. A "privatized" firm is defined as a firm that has private shares. The results of a comparison between privatized and fully state-owned firms are similar to those of a comparison between

Table 8.2 Financial discipline: Restructured versus non-restructured firms

Year	Firms with overdue bank debts (%) ^a		Firms with overdue taxes (%)		Firms with overdue social security (%)		Size of overdue bank debts (%) ^b		Size of overdue taxes (%) ^c		Size of overdue social security (%) ^c	
	Non-restructured	Restructured	Non-restructured	Restructured	Non-restructured	Restructured	Non-restructured	Restructured	Non-restructured	Restructured	Non-restructured	Restructured
1996	72.2	50.0	37.5	27.7	15.8	15.4	76.1	50.0	4.9	2.3	0.2	0.5
1997	73.9	52.7	40.2	34.8	19.7	18.0	77.7	48.4	3.8	3.2	0.2	0.4
1998	77.3	61.4	43.0	37.2	21.9	21.1	94.5	55.2	3.6	2.7	0.2	0.3
1999	79.0	61.3	44.9	42.8	26.0	26.6	102.6	53.7	2.9	3.1	0.3	0.4
2000	79.2	62.8	48.1	44.3	30.5	25.5	111.5	57.2	2.8	2.6	0.3	0.4
2001	77.3	68.6	51.7	45.1	34.2	31.1	90.0	78.5	2.7	2.3	0.4	0.6

Source: 2002 IFC survey.

^aOverdue bank debts include overdue bank loans and interests.

^bSize of overdue bank debts is defined as the total amount of bank debts divided by the amount of year-end outstanding loans.

^cSizes of overdue taxes and overdue social security are defined as the total amounts of overdue taxes and overdue social security divided by the value of the firm's gross assets, respectively (some firms did not pay taxes in some years, so the denominator uses the value of gross assets).

Table 8.3 Financial discipline: Privatization versus fully state-owned firms^a

Year	Firms with overdue bank debts (%)		Firms with overdue taxes (%)		Firms with overdue social security (%)		Size of overdue bank debts (%)		Size of overdue taxes (%)		Size of overdue social security (%)	
	Full state	Privatized	Full state	Privatized	Full state	Privatized	Full state	Privatized	Full state	Privatized	Full state	Privatized
1996	71.8	40.0	36.5	40.0	16.3	10.0	75.4	39.7	4.7	4.6	0.2	0.5
1997	73.1	51.3	39.7	41.0	20.0	17.9	76.5	45.7	3.7	6.6	0.2	0.5
1998	76.4	63.2	42.8	40.4	22.5	19.3	92.5	54.8	3.4	5.0	0.3	0.3
1999	77.9	62.8	45.3	44.2	27.3	22.1	99.5	56.5	2.8	4.9	0.3	0.3
2000	76.7	70.4	48.4	45.2	32.1	18.3	107.8	62.4	2.8	3.5	0.4	0.2
2001	77.0	66.9	52.1	47.2	36.4	24.6	99.1	59.5	2.8	3.0	0.5	0.3

Source: 2002 IFC survey.

^aPrivatized firms are firms with private shares. The definitions of the categories are the same as those in Table 8.2.

restructured and non-restructured firms; however, the advantage of privatized firms over fully state-owned firms has been strengthened in the case of overdue bank debts and overdue social security. This shows that restructuring with privatization works better than restructuring without privatization in terms of hardening the firms' budget constraint.

8.2.2 Efficiency

Restructured firms, especially truly privatized firms, were subjected to a harder budget constraint than the non-restructured firms. But, were they more productive? This sub-section compares the restructured and non-restructured firms in the new sample in terms of three performance indicators: return to assets, per worker sales, and new investment. The results are presented in Table 8.4. Restructured firms show better performance than the non-restructured ones in terms of return to assets and per-worker sales. In particular, the non-restructured firms, on average, were losing money in all the sample years, but the restructured firms showed positive average returns. However, the restructured firms remained indistinguishable from the non-restructured ones in terms of new investment. This shows that the better performance of the restructured firms was attributable not so much to more investment but rather to efficiency enhancement.

Table 8.5 then compares privatized and fully state-owned firms. The effect of restructuring was enhanced in terms of return to assets when it was accompanied by privatization, but its effect on per-worker sales remained about the same. In addition, privatized

Table 8.4 Efficiency: Restructured versus non-restructured firms

Year	Return to assets ^a (%)		Per-worker sales ^b (RMB 1,000)		New investment ^c (%)	
	Non-restructured	Restructured	Non-restructured	Restructured	Non-restructured	Restructured
1996	-1.3	1.8	5.2	4.0	17.0	17.9
1997	-1.4	1.9	4.7	5.4	16.0	21.0
1998	-1.9	1.4	5.2	5.5	16.5	19.2
1999	-1.8	1.5	5.3	5.7	16.8	16.5
2000	-1.8	1.2	5.5	6.1	16.4	16.4
2001	-1.5	0.6	5.9	6.8	17.9	15.3

Source: 2002 IFC survey.

^aReturn to assets is defined as the pre-tax profit divided by the value of the firm's gross assets.

^bIt is defined as sales value divided by on-duty workers. The value of sales is converted to 2001 renminbi.

^cNew investment divided by the value of the firm's gross assets.

Table 8.5 Performance: Privatized versus fully state-owned firms

Year	Return to assets ^a (%)		Per-worker sales ^b (RMB 1,000)		New investment ^c (%)	
	Full state	Privatized	Full state	Privatized	Full state	Privatized
1996	-1.2	2.5	5.0	6.8	16.6	20.8
1997	-1.4	3.2	4.7	5.7	15.7	14.7
1998	-1.9	4.2	5.2	6.1	15.8	15.0
1999	-2.0	4.1	5.2	6.9	16.2	12.7
2000	-2.2	3.7	5.1	7.8	16.2	11.4
2001	-2.1	2.4	5.5	7.3	17.8	11.0

Source: 2002 IFC Survey.

^aReturn to assets is defined as the pre-tax profit divided by the value of the firm's gross assets.

^bIt is defined as sales value divided by on-duty workers. The value of sales is converted to 2001 renminbi.

^cNew investment divided by the value of the firm's gross assets.

firms are shown to invest less than fully state-owned firms. This further supports the conclusion that efficiency improvements in the restructured firms were not made by more investments, but by more efficient use of existing manpower, equipment, and technology.

However, the above results are subject to one qualification. It is possible that better performing firms have been deliberately chosen to undergo restructuring and privatization either because local governments are concerned about efficiency improvement or because better performing firms are easier to privatize. In order to accommodate this consideration, we calculate the effect of privatization by adopting the difference-in-difference (DID) method. This method compares the difference in the performance of firms before and after privatization and also the difference between the fully state-owned firms in the same years. Thus, it is an effective nonparametric method to control firm-specific characteristics that the choice of privatization could be based on. In addition, it eliminates the confounding effects of temporal factors by comparing the performance differences of both the privatized firms and fully state-owned firms. Figure 8.2 summarizes the results. It shows the average effect of privatization for firms privatized in different years, being arranged by years after privatization. Two patterns emerge from the figure. First, privatization has a significantly positive effect on return to assets, and this effect increases as time passes. There is clearly a learning process for privatization to become effective in raising profitability. The new owners need to change the management structure, adopt new business models, and possibly shift to a new line of business. Second, privatization does not have a significantly positive, if not

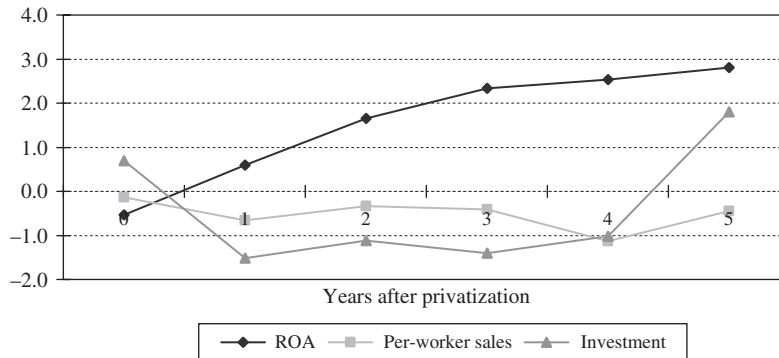


FIGURE 8.2 Effect of privatization calculated by the DID method

Source: Author's calculation based on the new sample of 387 firms.

negative, impact on labor productivity and investment. This result provides a specific cause for privatized firms' better performance with regard to profitability—they are more conscious than old-style SOEs in saving costs. It is well known that SOEs are used to an expansionary business model that pays little attention to saving capital, material, and wage costs. Privatization leads to a change in this model. Firms no longer pursue the goal of high growth rates in output and investment; rather, they focus on more efficient use of financial and human resources to generate more profits.

8.3 PRIVATIZATION AND EMPLOYMENT

The implications of privatization on employment have been a contentious issue in both the 1998 and 2004 debates on SOE privatization. In government-dominated media, pop star Liu Huan's song *It Is Just Another Start* was the anthem in the hey days of privatization and unemployment. "My heart's there, my dream's there; love is everywhere. Success or failure, life triumphs; it is just another start." However, some critiques are of the opinion that the song is opium, produced for the unemployed. It was a difficult time for China. China was used to being a working-class country—at least in theory, but suddenly "the masters" lost all their privileges. This was especially difficult for people in their late forties. This was the generation of people who had wasted their precious youth in the countryside, who had not got the opportunity to go to college in the first several years after the college entrance exams resumed in 1977, and had remained ordinary workers for 20 years after they returned to the city. They were too young to retire, yet too old to learn new skills. It is thus understandable that the debates frequently became

emotional in nature. This section will first describe the unemployment situation since the mid-1990s and then discuss the causes of unemployment and how the government has handled the issue.

8.3.1 Unemployment since the Mid-1990s

Figure 8.3 presents a broad picture of urban unemployment; it shows the data for employment in SOEs, collective firms, and private firms during 1998–2004. In the early half of the 1990s, employment in SOEs increased, consistent with the trend of increase in the number of SOEs shown in Figure 8.1. However, since 1996, the employment rate began to decline. Employment in collective firms began to decline as early as 1992. The largest retrenchment occurred in 1998 when 20 million people lost their jobs in SOEs. By 2004, the SOE sector lost 40% of the jobs that it had in 1995. The retrenchment in collective firms has been smoother, but greater in magnitude. In 2004, the number of jobs in collective firms was only one fourth of that in 1991, the highest in the 1990s. Between 1995 and 2004, the SOE sector lost a total of 45.5 million jobs, and the collective sector lost a total of 22.5 million jobs. That is, 68 million people had to find new jobs in the private sector during those 10 years. This was unprecedented for any country at any time. The United States might have experienced a sharper annual drop in employment during the Great Depression, but it could not match China in duration and the total number of unemployed. Curiously, the Chinese economy maintained very high growth rates even during those years (except in the first two years

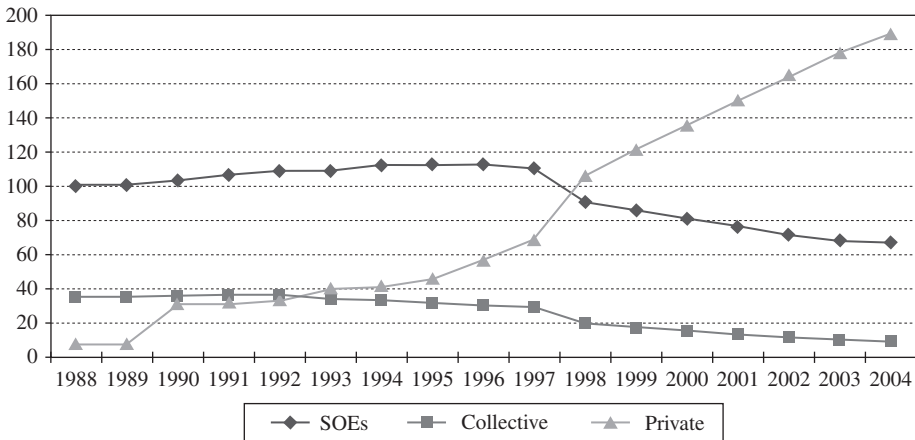


FIGURE 8.3 Urban employment in SOEs, collective firms, and private firms (million persons)

Source: NSB 1988–2004.

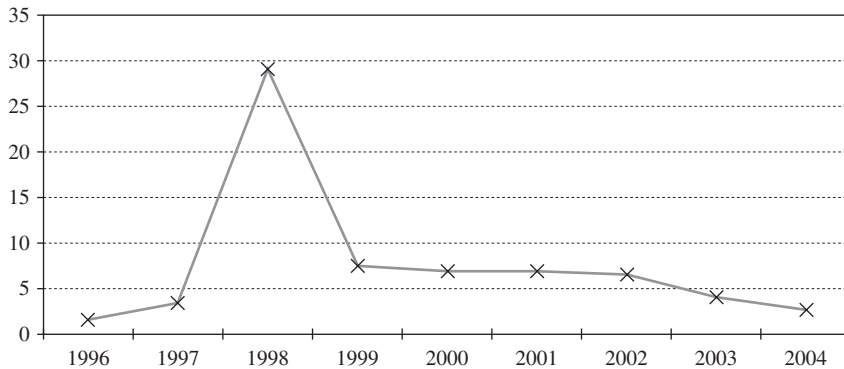


FIGURE 8.4 Reallocation of workers from SOE and collective sectors to private sector (million persons)

Source: Author's calculation based on Figure 8.3.

after the 1997 Asian financial crisis). The key to this puzzle is the expansion of the private sector. Employment in the private sector increased by 24 times between 1988 and 2004 and has become the largest sector in urban China since 1998. By 2004, 71% of the urban labor force was in the private sector. Figure 8.4 shows the number of workers reallocated from the SOE and collective sectors to the private sector during 1996–2004. In 1998 alone, when both the SOE and collective sectors had the largest shake-off, the private sector absorbed 29 million workers who lost jobs in SOEs or collective firms. In each successive year, the private sector absorbed an average of 5.7 million SOE or collective workers.

The above broad picture allows the reader to comprehend the scale of unemployment since the mid-1990s and to get an insight into the role played by the private sector in helping the government solve the unemployment issue. As we have learned in the last section, the privatization of SOEs and collective firms was partly caused by the boom of private firms. Now, the private sector also came forward to provide a solution for the unemployment issue accompanying privatization. This single fact shows that private firms are more viable than public firms. Proponents of SOEs have missed the large picture presented here; their arguments cannot stand the test of real data.

8.3.2 Privatization and Unemployment

Conventional wisdom believes that privatization has been the major cause of unemployment. For a layman, this view is warranted because privatization and massive unemployment have occurred concurrently. However, for professional economists, two things happening at the same time cannot establish a causality running from one factor

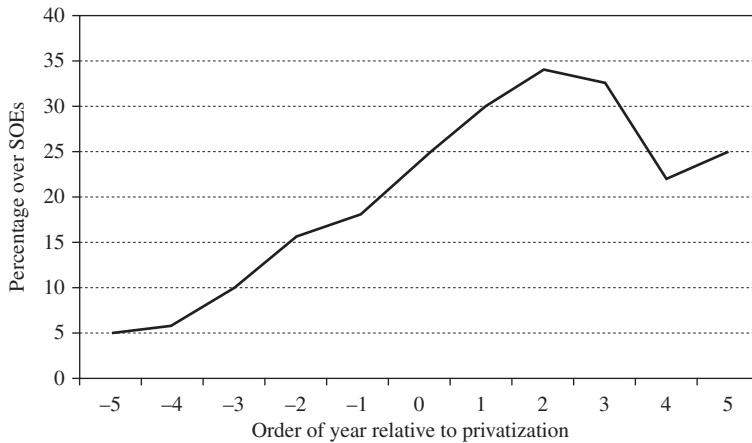


FIGURE 8.5 The impact of privatization on employment

Source: Huang and Yao 2007, Figure 4.

to another, for they may both be caused by other factors and appear at the same time. A classical example is the relationship between fashion and the stock market index. For example, two independent events such as the increase in stock market index and red skirts becoming fashionable may occur simultaneously. However, this observation cannot lead us to predict that when women wear red skirts the next time, the stock market price will increase again.

At this point, we would like to cite one study that the author performed along with a student, Lingwen Huang, using the 2002 IFC survey data. Figure 8.5 summarizes the main findings of that study. We define privatization as the presence of private shares. The horizontal axis represents the order of year relative to the year when privatization takes place. For example, 0 means the year of privatization, -1 and 1 represent one year before and one year after privatization, respectively, and so on. The vertical axis represents the gap between the employment growth rates of privatized firms and old-style SOEs. Employment is measured by the number of on-duty workers; that is, workers who work regularly in a firm. The data for drawing the curve are obtained by a fixed-effect regression, which gives a DID estimator between the experiment group (privatized SOEs) and the control group (old-style SOEs). It is worth noting that both privatized and old-style SOEs were cutting back jobs during the sample period 1995–2001. Therefore, a positive gap should be an indicator that one group of firms had slower job cuts than the other. As we can see from the figure, privatized SOEs have maintained a positive gap with the old-style SOEs between five years before privatization and five years after

privatization. Between the year of privatization and five years after privatization, the average gap is 27.9 percentage points. That is, other things being equal, a privatized SOE reduces the number of jobs at a slower rate than an old-style SOE by a rate of 27.9%. This is a very large gap and directly contradicts conventional wisdom.

Some people may argue that the better performance of privatized SOEs is because of job cuts before privatization. This is possible because the manager might know about the impending privatization of the firm and may hence reduce the strength of the firm's workforce. Or, there could be a large shake-off during the year of privatization. However, Figure 8.5 does not support either possibility. Even in the year of privatization and the years before, privatized SOEs were found to outperform old-style SOEs, albeit with smaller margins. One may also speculate that our findings could be attributed to the fact that by nature, privatized firms are better than old-style SOEs. However, this speculation is unwarranted because the fixed-effect regression we use has controlled firm-specific characteristics that would affect a firm's long-term performance potential. In effect, it provides DID type of results; that is, it compares the difference between employment growth before and after privatization for the privatized SOEs and the difference in employment growth for the old-style SOEs during the same years.

Then, how do we make sense of the simultaneous appearance of SOE privatization and unemployment? We still need concrete evidence to answer this question. For that, we use the 2002 IFC survey again to present the shares of on-duty employees, retired workers, *xiagang*, and discharged workers in both the non-restructured and restructured SOEs in 2001 (Table 8.6). Note that *xiagang* workers and retired workers were sometimes included in the enterprises' statistics of total employment (but in some cases

Table 8.6 Shares of on-duty, retired, *xiagang*, and discharged employees in 2001

Type of firm	Number of firms with valid data	Total number of employees (1,000)	On duty (%)	Retired (%)	<i>Xiagang</i> (%)	Discharged (%)
Restructured firms	214	308	65.1	26.2	16.8	1.0
Shareholding companies	32	85	75.1	16.2	7.8	0.9
Limited liability companies	119	190	62.1	17.5	19.2	1.2
Partnerships/cooperatives	16	11	51.6	24.4	22.8	1.2
Single-owner private firms	2	0.7	37.0	9.3	53.7	0.0
Other	45	21	59.9	12.7	27.2	0.3
Non-restructured SOEs	280	209	43.9	22.1	32.7	1.3
Total	494	518	56.6	19.1	23.2	1.1

Source: 2002 IFC survey.

excluded) because these workers were still being partly supported by the firm. The number of retired employees includes all those who retired in the previous years. The number of *xiagang* workers includes those laid off in previous years but still listed by the reemployment service center and therefore still counted as employees. The statistics did not include *xiagang* workers who had found employment or had been removed from the reemployment service center after three years. The number of discharged employees only includes those who were discharged in 2001. One of the results in the table is of particular interest to us. *Xiagang* workers comprised 33% of the employees in non-restructured SOEs but only 17% of the employees in restructured firms. On the other hand, on-duty workers comprised 44% of the employees in non-restructured SOEs but 65% in restructured SOEs. This comparison shows that unemployment rose because restructured and privatized SOEs laid off redundant workers. It is well known that SOEs face a serious problem of disguised unemployment; it is common to find two or more persons doing the work of one person. This is obviously not a productive way to use manpower. Therefore, from the efficiency point of view, it is justifiable that restructuring and privatization lay off redundant workers. Because firm efficiency is improved, restructured and privatized firms can retain more productive workers than old-style SOEs. Table 8.7 suggests that in the long run, restructured firms have indeed performed better than the old-style SOEs. In the table, estimates are made of the cumulative number of *xiagang* and discharged employees in sample enterprises over the

Table 8.7 Accumulated *xiagang* and discharged workers per firm in the period 1995–2001

Type of firm	<i>Xiagang</i> ^a		Discharged	
	Number	Percentage ^b	Number	Percentage ^b
Restructured firms	417.4	29	69.1	4.8
Shareholding companies	318.8	12	116.9	4.4
Limited liability companies	526.9	33	87.8	5.5
Partnerships/cooperatives	295.6	43	13.1	1.9
Single-owner private firms	245.0	70	0.0	0.0
Other	238.0	51	5.6	1.2
Non-restructured SOEs	515.0	69	37.3	5.0
Total	471.9	45	51.4	4.9

Source: 2002 IFC survey.

^aThe number of accumulated *xiagang* workers is calculated under the assumption that their average stay in the reemployment service centers was three years (reflecting the difficulty of gaining employment and the provision of a subsidy over the period that acts as a disincentive to seek employment).

^bPercentage in terms of the average number of total employees in 2001.

period 1995–2001. Again, there was a significantly higher share of *xiagang* workers in the non-restructured SOEs as compared with the restructured firms (69% versus 29%). Therefore, even if they had laid off more workers during the year that restructuring was implemented, the restructured firms had accumulated significantly less *xiagang* workers after restructuring. This implies that restructuring improves the employment situation in the long run.

8.3.3 Government Policy toward Unemployment

Notwithstanding efficiency, the adjustment has been painful for the laid-off workers. It would be unjust and the CCP's legitimacy would be in question if the government did not take any action to facilitate their transition to new jobs or provide them with living assistance before they found new jobs. Realizing this, both the central and local governments made huge efforts to retrain the unemployed workers. In addition, a subsistence maintenance program called *dibao* was established. Till date, 20 million urban residents are under this program.

However, reemployment has always been recognized as the best solution to absorb unemployed workers. Almost every city established a reemployment center to coordinate government efforts to find new jobs for the unemployed workers. Usually, an unemployed SOE worker was first registered with the center and could then begin to take various training sessions offered by the government. He or she could stay with the center for a maximum of three years and in those three years, could receive government subsidies as well as a small stipend from his or her old work unit. If a worker did not find employment in three years, he or she was moved to the unemployment insurance program or the *dibao* program.

In order to encourage reemployment, the government gave tax holidays and deductions to former SOE employees who started a business or to new enterprises that would hire *xiagang* workers such that at least 60% or more of their workforce would comprise them. Government departments and banks also helped these firms with registration and access to bank loans.

However, reemployment was not always possible, and layoff was unavoidable. During the central planning era, workers were permanently employed by SOEs until they retired and received a pension from the enterprise. In the mid-1980s, it was decided that new recruits would no longer have a job for life and would be put under contracts. In practice, this hardly changed the situation as most contracts were automatically renewed. This long history of secure jobs had created a reason for laid-off workers to ask for compensation. The government was also ready to accept this claim, partly because it admitted it as a fair claim and partly because it wanted to achieve social stability.

Determining the level of compensation to be paid to the laid-off workers was a difficult task. In reality, the level of compensation depended on the collective bargaining

power of the workers. While in most cities, workers were compensated with three years' salaries in return for their job security, in a few cases, workers received much higher levels of compensation.

The most common way for local governments to finance the compensation was to use the money obtained from selling the SOE assets. In many cases, they preferred that the new owner hired as many workers as possible in exchange for the reduced price of assets (including land). Many enterprises were sold at zero value, and in some cases, governments paid extra subsidies to cover the redeployment of employees. Here are several examples from cities covered by the 2002 IFC survey.

In Tangshan, the buyers of SOEs were required to take responsibility for all employees and retired workers.⁸ The government compensated buyers for their future costs of redeploying workers by reducing the price of assets on the basis that they could only fire, at the most, 10% of the employees. The new owners frequently reported that the compensation was inadequate as the cost of redeploying workers was much higher. However, there were also complaints from employees that state assets such as land were being sold off at very low prices.

Harbin followed a similar practice. The municipal government allowed enterprises going through the restructuring process to sell part of their assets to compensate employees who were being discharged. Land use rights could be transferred if funds were inadequate.

Guiyang adopted a policy that allowed more inputs from the employees. Restructuring plans had to be passed by the employee conference or employee representative committee. Employees had to agree with the decision to terminate their contracts. They would receive a lump-sum payment of two months' wages for every year of service. Such generous conditions, which were not common elsewhere, made the restructuring process more difficult because employees were likely to block the decision to undergo restructuring until the situation became so bad that no wages could be paid. This was linked to the underdevelopment of the private sector in Guiyang. There were limited opportunities for reemployment; hence, workers asked for more compensation when they had to leave their enterprises.

Perhaps, the best practice was the one adopted by the Nan-an district of Chongqing City. In Nan-an, the employment contracts of all SOE employees were terminated and compensation was given before an enterprise was sold or went bankrupt, regardless of whether or not the workers would be reemployed by the new owners of the enterprises.

8. Workers and retired SOE staff members are covered by the new pension system. However, pension payments are low, perhaps lower than the common pension rate in the SOEs. Enterprises still have to pay the difference between the actual and common pension rates.

The district government was responsible for finding new jobs for the employees or providing them with living subsistence. This made restructuring much easier and eased the dissensions that occurred after restructuring. As a result, restructuring moved faster and smoother in this district than in others that adopted a municipal government policy of redeploying employees after the enterprises went bankrupt. In these districts, the SOE assets were used to pay off debts, leaving little for employee redeployment.

For the CCP, deciding on how to treat unemployed workers was a matter of legitimacy: If workers became the victim of massive unemployment, how could the CCP still claim that it was a working-class party? While asking the local governments to provide assistance to the unemployed workers to find new jobs, the CCP also transformed itself from a working-class party to an all people's party. The latter move was clearly visible in the "Three Representations" announced in 2002. While it was the result of a series of ideological shifts starting in 1978, the Three Representations had a lot to do with the CCP's alienation from the working class in the process of privatization. Privatization improved firm efficiency and was thus good for the society as a whole; however, the costs were footed almost solely by workers. Weighing the gains and losses, the CCP chose to put efficiency before workers' temporary welfare. In doing so, the CCP brought a brighter future to China, but at the same time, lost its traditional class base. Claiming to be an all people's party was one way to regain popular support. This was a clever move because workers were not excluded from the "Three Representations"; at least in theory, the CCP has widened its class base.

8.4 HANDLING THE SOE ASSETS

One of the focuses of both the debates in 1998 and 2004 was the manner in which the SOE assets were handled. Many people believed that the SOEs were sold at very low prices to insiders and outside buyers. There is no doubt that there were cases of manipulation through which new owners obtained the SOEs at low prices. This could be particularly true in the case of management buyouts. For example, when he bought Kelong, Gu Chujun promised to pay the local government in cash in one installment; however, he reneged after becoming the new owner of Kelong saying that that he could only pay the price gradually. This is a classic example of using the purchased company to pay the price. In effect, the new owner received the company for free or by paying a small upfront price. However, for the vast majority of privatization cases, this kind of manipulation has been uncommon; nevertheless, discounts have been offered by local governments to the new owners of SOEs. Table 8.8 presents the percentages of restructured firms obtaining discounts in the 11 sample cities. There

Table 8.8 Discounts provided to restructured firms by cities

	Number of restructured firms	Number receiving discounts	%
Harbin	35	2	5.7
Fushun	4	1	25.0
Tangshan	46	8	17.4
Weifang	25	7	28.0
Xining	13	0	0.0
Huangshi	53	19	35.8
Zhenjiang	40	12	30.0
Hengyang	38	4	10.5
Guiyang	30	7	23.3
Lanzhou	12	1	8.3
Chengdu	18	3	16.7
Total	314	64	20.4

Source: 2002 IFC survey.

were large variations among the cities ranging from no firms in Xining to 35.8% of firms that received discounts in Huangshi. Overall, 64 of the 314 restructured firms, or 20.4% of the firms, received discounts. The actual percentage might be higher than this because the questionnaire was administered to the managers of the restructured firms who tended not to report discounts. It was found that discounts were given mainly for three reasons.

The first was the lack of a transparent market to sell the SOE assets. Local capital markets were absent in most cities. The national stock market was beyond the reach of most local firms. There were local spontaneous over-the-counter markets trading shares of local firms, but they were quickly outlawed by the central government. The lack of functional, local capital markets made insider privatization a preferred way to privatize the SOEs. For employees, selling their enterprise to its manager might have been a better alternative than selling it to an outsider; this is because there was a greater chance that the manager would continue the old line of business so the employees were more likely to keep their jobs. On the other hand, a new owner could change the line of business, and there would be a larger chance of losing their jobs. However, insider privatization made the underpricing of SOE assets much easier. Because there was no competitive bidding, the pricing of SOE assets relied exclusively on asset evaluations provided by outside auditors. There are several standard methods for valuing business assets; these include historical cost and realized incomes, replacement cost and business

income, current cash equivalents and realizable income, and discounted cash flows and economic income. However, none of these methods can overcome the information advantage of the insiders; managers can easily manipulate or selectively provide information to the auditors in order to ensure a low price.

The second reason was the local governments' intention to speed up the process of privatization. For many municipal governments, the SOEs were a burden. As government officials in Shunde put it, "SOEs are bleeding without privatization." Government officials in Harbin believed that there was an "ice-pop effect" for SOE assets: If SOEs remained under the ownership of the government, their assets would gradually "melt"; that is, their values would diminish. Therefore, there was an urgency for local governments to privatize their SOEs as soon as possible. As a consequence, underpricing became common. Many of the 11 sample cities had discount schemes to encourage the speedy purchases of SOEs. For example, Harbin allowed buyers who purchased the entire business and made a one-off payment to receive a 30% discount. Those making a one-off payment covering 60% of the total assets could receive a 10% discount. After 60% of the value of assets, for every percentage point increase in payment, a half-percentage point discount was offered (i.e., a total discount of 30% if all the net assets were bought). The first payment was not to be below 30% of the decided price and the payments were to be made in installments, with a written agreement given before the assets were transferred.

The third and perhaps the most common reason for the underpricing of the SOE assets was that local governments had bundled the sales of physical assets with the reemployment of employees. The best practice was perhaps the one adopted by the Nan-an district of Chongqing City—it separated the physical assets from employees and sold the assets in open biddings. However, this practice implied a large burden on the government to re-employ the workers. Therefore, most cities did not adopt it. Instead, they required the new owner to employ a certain percentage of the enterprise's original employees. In most cases, the new owner was required not to fire more than 10% of the workforce. In order to compensate for the new owners hiring extra employees, the local governments gave them discounts on the prices of assets. This created a large room for bargaining, especially in the case of insider privatization. The inside buyers could use their information advantage on the value of assets and the competence of workers to make claims that served their purposes.

All three reasons are linked to the central or local governments' own agendas. In particular, exchanging discounts on physical assets for more employment reflected the governments' paramount concern for social stability. It was also a matter of who assumed the responsibility of maintaining social stability. The "discounts for employment" scheme shifted the responsibility from local governments to the new owners; that

is, it was a way for local governments to evade their own responsibility. The practice of Chongqing's Nan-an district could not spread to other parts of the city or other cities precisely because governments in those places did not want to accept the responsibility of retraining and re-employing the laid-off workers. This was not because local governments did not have the financial resources to do so. Since the new owners could afford to hire more workers, it was possible for a local government to raise the price of the SOE being sold to the exact amount that the new owner would spend on hiring extra workers, and the new owner would happily accept the offer. The problem was more about the future where uncertainty prevailed. For example, there could be an economic downturn, and reemployed workers could lose their jobs again. With their unique position as the only seller, local governments could shift the burden of uncertainty to the new owners of the SOEs being sold. However, those new owners were making the same calculations as the local governments. Their strategy was to take the firm and ask for as many concessions as possible at the time of privatization and later try to evade government regulations to fire more workers than what they had promised. The 2002 IFC survey did find that many privatized firms, especially those sold to outsiders, fired more than 10% of their workforce after privatization. Another way to evade government regulations was to sell the firm to another owner who was not bounded by the original deal reached at the point of privatization and could fire workers as he or she wished. The intention of the governments to protect the workers resulted in it becoming the cause of their ultimate sufferings.

However, overall, privatization has been successful in terms of handling the SOE assets. There were unjust deals and some people benefited more than what they deserved, but it seemed that the possibility of alternatives was bleak. Some opponents of insider privatization (e.g., Qin 2004) believed that the voucher scheme used in Eastern Europe was a better alternative for China. To them, it was the only equitable way of privatization. However, the end result of voucher privatization may be even worse than that of insider privatization. The shares of ordinary citizens in any firm are infinitesimally small; hence, the best way to get something out of the vouchers they have is to cash them. This will inevitably drive down the price of vouchers and the only beneficiary will be people who are already rich. For example, one of the ways that the Russian financial tycoons made their fortunes in privatization was by buying cheap vouchers. Voucher privatization seems to provide an equal start for everyone, but it can easily result in a very unequal distribution of wealth. We need to note that most SOEs under outright sales or privatization were small and medium-sized firms; large SOEs have been either kept state owned or are listed in the stock market. Since most privatized SOEs were sold to the majority of employees at least during the first round of privatization, insider privatization actually distributed wealth quite equally among ordinary people.

8.5 CONCLUDING REMARKS

Our narrative of the SOE reform has served the purpose of demonstrating how the interplay between grassroots reforms and the ideological shifts at the center has shaped the path of reform. Reforms initiated by the central government within the boundary of public ownership, particularly, manager contracting, did not work. Institutional innovations at the grassroots level immediately after Deng Xiaoping's tour to the south in 1992 led to the privatization of SOEs, which tested the boundary of public ownership. In the meantime, the CCP completed a major ideological shift by aiming to build a socialist market economy in China. However, what "a socialist market economy" meant was not clear; hence, there was a period of indeterminacy regarding the ownership experiments carried out by local governments. When the central government finally reached the "*zhuada fangxiao*" policy in 1995, a wave of privatization began in the country. However, privatization shook off the redundant workers in the SOEs causing millions of workers to lose their jobs. The CCP's legitimacy as a working-class party was questioned. To handle this issue, the CCP did two things: First, it put in great efforts to help the laid-off workers find new jobs or provide them with subsistence allowances. Second, it embarked on a major ideological shift by repositioning itself as a representative of all citizens in China. The announcement of the Three Representations in 2002 has transformed the CCP from a working-class party to an all people's party. With this transformation, the CCP has become a party that is disinterested in the various segments of the Chinese society and can now legitimately put the long-term welfare of China as a whole before any segmental interests.

The privatization of SOEs has fundamentally changed China's economic landscape, making China a private ownership-dominated mixed economy. However, the question left unanswered since the 1990s is how to define a socialist market economy. We have established a market economy, but where is socialism? This question is much more difficult to answer now than it was 20 years ago when public ownership dominated the economy. The concept of "harmonious society" is an attempt by the new leadership to bring the core ideas of socialism back to China. However, whether this concept, laden with traditional Chinese values, fits into the modern society is yet to be answered. After all, the CCP is still a Marxist party and its theoretical foundation is still deeply rooted in traditional Marxism. It is difficult to deduce the concept of harmonious society from orthodox Marxism, which emphasizes issues such as class struggles and exploitation of the capitalist class over the proletarians. In order to make the concept a part of the party's core ideology, a fundamental shift is needed to rebuild the party's theoretical foundation.

CHAPTER
9

The Dual-track Price Reform

The reform of the planned economy, the other pillar of Stalinist socialism, has been a mixed success in the last 30 years. The reform has achieved remarkable success in terms of eliminating price and quantity control on commodities; however, the government still tightly controls large investment projects through the permission system (*shenpi*). In addition, both the central and local governments still strongly control the economy, and administrative measures are often preferred over market-based regulatory tools. This chapter does not intend to provide a comprehensive review of the entire history of the planned economy reform, which would be a rather daunting task. Instead, it focuses on one aspect of the reform—the dual-track price reform between 1985 and 1994. We will study this reform because it is a classical example of Chinese gradualism toward reform, and it also shows how complementary reform measures can reinforce each other in converging to the market.

In Section 9.1, we will first provide a succinct review of the dual-track price reform. The dual-track price system (DPS) was adopted for both political and economic reasons. It was a political compromise that eventually benefited the economy. In its 10-year history, the DPS was plagued with unending debates and political risks. The reform process itself is a fascinating story. In Section 9.2, we will discuss the efficiency implications of the DPS. The orthodox economist may be correct in pointing out that the DPS is a second-best arrangement at best. However, it proved itself to be the best way, at least in the Chinese context, for the transition from a planned to a market-based economy with minimal loss of efficiency. In Section 9.3, we will highlight the accomplishments of the DPS. The intended accomplishment was China's completion of its transition without causing drastic economic turmoil. However, it is perhaps its unintended accomplishments that have drawn more academic attention. The township and village enterprises (TVEs) and the private sector were great beneficiaries of the DPS, and these in turn contributed to the conclusion of the dual-track system. In Section 9.4, we will return to

a theoretical exploration of why China adopted the dual-track approach to price reform and how it has succeeded. Section 9.5 will then conclude the chapter.

9.1 A BRIEF HISTORY OF THE DUAL-TRACK PRICE SYSTEM

9.1.1 Inception, Debates, and Progress

While both the rural and enterprise reforms started from grassroots innovations, the dual-track price reform was a result of scholastic debates. The critical moment was the Moganshan Conference held in early September of 1984 in the scenic Moganshan mountain area of Zhejiang Province. The participants of the conference were mainly young economists and the main theme was price reform. The outcome of the lengthy discussions was three main opinions. One, dubbed “the adjustment sect” (*tiao-pai*) at the time, advocated the adjustment of prices within the planned system. Another, dubbed “the let-go sect” (*fang-pai*), advocated eliminating price control and allowing the market to determine prices. The third opinion took the middle ground and advocated the combination of planned adjustment and market determination. This opinion that was backed by the majority became the major suggestion in the report presented to Zhang Jinfu, a State Council member and the chairman of the State Economic Commission, who was in Hangzhou at the time of the conference. Zhang took the suggestion back to Beijing to the Third Plenary of the Twelfth Chinese Communist Party (CCP) Congress held in October 1984. The “Decision for Economic System Reform” was prepared during this plenary, which made an important decision to start a full-fledged reform in China. This document gave high priority to price reform. In Section 5, it stated that “price system reform is the key to the success or failure of the whole economic system reform.” The dual-track price system was proposed as a strategy to reform the planned price, as stated in the “Decision for Economic System Reform”:

The improper price system has a close relationship with the price management system. At the same time of price adjustment, it is imperative to reform the overly concentrated price management system, gradually shrink the scope of government uniform pricing, and properly enlarge the scope of prices with a certain band of floating and the scope of free prices, so prices can more aptly reflect the changes in social labor productivity and market demand and supply, and better meet the need of national economic development. (The CCP Central Committee, “Decision for Economic System Reform,” October 20, 1984)

Although the word “dual-track” does not appear in the above quote or other places in the “Decision for Economic System Reform,” the road set by this document to price reform

was clearly that of the dual-track system.¹ It is noteworthy that dual prices appeared in agricultural commodities before the Moganshan Conference. Farmers were paid a lower price—*dinggou jia* (quota price)—for their grain sales to the government as part of their obligations, but were paid a higher price—*chaogou jia* (above-quota price) for their above-quota sales. Initially, *chaogou jia* was paid by the government, but soon the market was opened and farmers were allowed to sell their above-quota products in the market. As a result, two tracks of prices—the quota price and the market price—existed for the same product. The DPS was at least partly inspired by the dual-track system implemented for agricultural products; however, as a strategy to get rid of the planned economy, it was new and innovative. However, for the participants of the Moganshan Conference, it was a compromise without other practical options. As Hua Sheng, one of the key figures in engineering the idea of the dual-track system in the conference, remarked in 2008, “For the options of price reform, we did not have deep theoretical deliberations at that time—at least not in the conference, but only felt that ‘adjustment’ was a method of the planned economy, and ‘let-go’ did not fit the then Chinese reality either. Therefore, we reached a method of combining ‘adjustment’ and ‘let-go’, which was the dual-track system.”²

However, it turned out that the compromise in the conference reflected a larger compromise at the national level. Within the central government, the DPS was adopted as a way to protect those groups of the state-owned enterprises (SOEs) that had high stakes in the planned economy, but at the same time to move gradually toward the market-based economy (Wu 2004). Despite this, there were debates on the DPS since its inception as a central government policy in early 1985. In their book *The Historical Fate of the Dual-track Price System* written in 1992 and published in 1993, Yang Shengming and Li Jun (1993) identified three episodes of debates between 1985 and 1991. The first episode covered the first two years after the inception of the DPS and was about the nature of the system. From the very beginning, there were scholars who believed that the DPS was distorted and needed to be abolished as soon as possible. The second episode of debates covered 1987 and 1988 and was about the shortcomings of the DPS. In 1985, China entered the first round of overheating since the People’s Republic was established. The gaps between the planned prices and market prices widened and *guan-dao* (official profiteering) became rampant. Many people believed that the DPS would lead to the spread of institutional corruption. On the other hand, the proponents warned that the shortcomings of the DPS should not be overstated. The third episode covered 1989 and

1. According to Yang and Li (1993), the term “dual-track system” first appeared in Chen Xu, “*gangcai jiage shuanggui zhi yanbian qushi ji qianjian*” [The trend and a preliminary analysis of the “dual-track system” in steel prices], *Chengben yu jiage ziliao* [Materials on Costs and Prices], no. 10 (June, 1985).

2. “*Huishou moganshan huiyi*” [A retrospective on the Moganshan Conference], *ershiji shiji jingji baodao* [*The Twenty-first Economic Herald*], February 22, 2008.

1991. The debate was about the direction of the DPS—whether to converge to a planned economy or to a market-based economy. In the midst of the conservative political atmosphere after the Tian’anmen Event, the Fifth Plenary of the CCP’s Thirteen Congress reached a decision in November 1989 to rectify and readjust the economy. The DPS began to slip back to the planned track. Specifically, the plenary proposed to unify the prices of coal. In practice, the unification of the prices of rubber and cement had been carried out before the plenary, but both went back to the planned track. This, of course, was against the initial design of the DPS and was duly opposed by its proponents.

It was Deng Xiaoping’s tour of the south in the spring of 1992 that saved the DPS and pushed it toward converging to the market track. In the early 1990s, two events signaled the end of the DPS and the accomplishment of the transition from a planned to a market-based economy. One was the abolishment of food stamps in 1993 and the other was the unification of the exchange rates in 1994. During the period of the planned economy, almost everything was rationed; people in the city were used to the life of coupons. Most of the coupons were out of circulation in the 1980s, and by the early 1990s, only food stamps were in use. The abolishment of food stamps had a strong implication—the Chinese government was confident that obtaining constant food supply was no longer a serious problem for the Chinese people. Dual-track exchange rates were first introduced in 1981 and were a result of the tradeoff between two purposes—maintaining a certain level of foreign exchange income and encouraging exports. Their unification to a single rate showed that Chinese exports had gained competitiveness in the international market by the early 1990s and owing to the increasing inflow of direct foreign investment, foreign exchange constraint was no longer a serious problem.³

It is noteworthy though that there were two failed attempts to unify the dual tracks to the market track in 1986 and 1988. They failed mostly because they were carried out at wrong times. The Chinese economy began to show a clear trend of overheating in 1984 and 1985. The inflation rate reached 10% in 1984. The economy was still what Kornai calls “a shortage economy”; getting rid of the planned track and the production quotas would inevitably fuel the inflation. The 1988 attempt, called *jiage chuanguan* (price break-through), was worse than the 1986 attempt because inflation approached 20% in 1988. It also had huge political consequences. The 1989 student movement and the ensuing dismissal of Zhao Ziyang, the party secretary, were both closely related to the 1988 inflation. In contrast, the successful unification of the two track prices in the early 1990s benefited greatly from the calm and even the slightly depressing macroeconomic conditions after the 1989 Tian’anmen Event. Next, we provide some data to show the linkage between macroeconomic conditions and the evolution of the dual-track system.

3. For more discussions on the exchange rate regime, see Chapter 11 on financial reform.

9.1.2 Macroeconomic Conditions and the Dual-track System

Yang Shengming and Li Jun's *The Historical Fate of the Dual-track Price System* provided a systematic account of how the DPS had worked between 1985 and 1991. One aspect of the DPS was that there were intensive discussions on the price gaps between the planned and market tracks. Yang and Li aptly noticed that abstract discussions about the gaps were meaningless, and it was critical to link the gaps to macroeconomic conditions. They wrote:

One opinion believes that "it depends, in addition to management factors, most importantly on the gaps between planned and non-planned prices whether dual-track prices have more shortcomings than merits or have more merits than shortcomings. If the gaps are not large (30%–50%), it is possible that there are more merits than shortcomings. If the gaps are more than 30%–50% or even reach 100%, it has more shortcomings than merits." This opinion summarizes the merits and shortcomings of the dual-track system as a problem of price gaps (*guiju*, track distances); it may oversimplify the issue. We have to ask, what determines the size of price gaps and the dimension of track distances? Obviously, it is determined by macroeconomic conditions, especially market conditions. One kind of macroeconomic condition determines one kind of price gap or track distance. Therefore, we cannot stop at the size of price gaps or track distances when we discuss the merits and shortcomings of dual track prices, but should move one step further to probe into the macroeconomic conditions. (Yang and Li 1993, 68)

Yang and Li also provided detailed statistics on the evolution of price gaps between the planned and market tracks. It is clear that the gaps fluctuated along with the changes in macroeconomic conditions. When the economy was overheated, the gaps increased; when the economy cooled down, they decreased. Table 9.1, adopted from Table 1 in Yang and Li (1993), provides the case of a county in Jiangsu Province during

Table 9.1 Dual-track prices of agricultural inputs in Guanyun County, Jiangsu Province

Year	Urea (RMB/ton)			Pesticides (RMB/kg)			Plastic sheets (RMB/kg)		
	Planned	Market	Gap (%)	Planned	Market	Gap (%)	Planned	Market	Gap (%)
1984	560	640	14.3	4.90	5.50	12.2	3.35	3.35	0.0
1985	560	720	28.6	4.90	5.80	18.4	3.35	3.90	16.4
1986	560	860	53.6	5.56	6.50	16.9	3.41	7.40	117.0
1987	560	960	71.4	6.70	9.00	34.3	4.70	9.60	104.3
1988	560	1200	114.3	8.80	13.00	47.7	4.70	11.00	134.0

Source: Yang and Li 1993, 52, Table 1.

Note: The gap is the percentage difference of the market price higher than the planned price.

Table 9.2 Price gaps between the two tracks: 1987–1991 (%)

Year	Coal	Crude oil	Gasoline	Diesel	Steel	Iron	Cement	Timber
1987	122.9	357.1	62.9	159.1	66.6	35.8	34.7	146.0
1988	178.2	345.6	56.7	144.2	57.0	34.8	29.7	175.3
1989	263.1	261.0	71.2	170.3	73.6	52.9	41.3	198.8
1990	181.6	202.3	63.6	163.4	50.5	39.8	29.3	87.1
1991	123.0	168.8	42.9	95.1	19.4	18.9	0.0	82.3

Source: Yang and Li 1993; 58–59, 61; Tables 5 and 6.

1984–1988.⁴ The table compares the planned and market prices of three agricultural inputs—urea, pesticides, and plastic sheets. It is clear that the gaps between the market and the planned tracks widened with time and an increase in inflation. By 1988, the market prices of urea and plastic sheets more than doubled their planned prices. The market price of pesticides was also close to 50% higher than its planned price. The cause for these growing gaps was clear—the planned prices increased much slower than the market prices; in the case of urea, the planned price did not increase at all. Inflation has much stronger effects on the market track than on the planned track.

As the economy cooled down after 1989, the gaps between the two tracks became narrower. Table 9.2, adopted from Tables 5 and 6 in Yang and Li (1993), shows the trends of several key inputs between 1987 and 1991. There were large variations across different products. The gaps between the market and planned prices of coal and crude oil were the highest. This was consistent with the Chinese government’s policy to suppress the prices of raw materials, a policy that has its roots in the planned economy period and is still followed today. Regardless of their absolute sizes, all the gaps (except crude oil) took a downturn in 1989 and declined thereafter. In the case of cement, the price gap disappeared by 1991. This was caused by two converging factors. One was that market prices dropped as the economy cooled down, and the other was that planned prices were increased because the government became more confident in raising prices.

The shrinking gaps between the planned and market tracks provided a favorable condition for the government to merge the two tracks in the early 1990s. This was facilitated by the secular decline in the share of the planned track in the total volume of transactions. By 1991, this share decreased to about 30% (Zhang 1997, 214, Figure 5.9).

4. One of the features of the DPS was that price formation (for both the planned and market tracks) was highly segmented. This was because a national market had not yet been created and local governments tried to adjust the planned prices according to local market conditions.

The role of the planned track diminished over the years; its abolishment in the early 1990s was thus more symbolic than substantial.

9.2 EFFICIENCY OF THE DUAL-TRACK PRICE SYSTEM

The most important accomplishment of the DPS is that it allowed China to transition from a planned to a market-based economy in a relatively smooth manner. This is a great achievement when compared with the former Soviet Union and Eastern European countries with disorganized economies that eventually collapsed. However, in addition to this achievement, the DPS resulted in minimal efficiency losses. In this section, we will provide an assessment of the DPS's efficiency from a strictly economic point of view. Within the scope of this view, we will first identify the potential merits and demerits of this system and then discuss those in greater detail.

The merits of the DPS are twofold. First, it prevented disorganization of the economy and potential hyper-inflation when the economy was trapped in severe shortages. Second, to the extent that government quotas were not binding constraints, the prices that firms took to make their production decisions were the market prices; hence, resource allocation reached its optimal state. The demerits of the DPS are also twofold. First, government quotas might still be binding, especially in the first several years of the DPS; therefore, there could be deadweight losses associated with the DPS. Second, the gaps between the planned track and the market track led to rampant rent-seeking and wasteful competition for planned quotas.

9.2.1 Efficiency Gains

We will begin with the DPS's first efficiency gain; that is, prevention of disorganization and hyper-inflation. The Chinese economy, like all the other Stalinist socialist economies, was characterized by severe shortages when China began economic reform. Price control and quotas were implemented to solve the shortage problem. If price and quantity control were removed overnight, hyper-inflation would have been unavoidable, similar to what took place in the former Soviet Union and Eastern European countries. The DPS helped to release the pressures of economic shortages over a sufficiently long time—in the case of China, about 10 years—in order to ensure smooth transition. Although inflation could not be avoided and even caused political turmoil, the Chinese economy had avoided disorganization and hyper-inflation. This was clearly noted by Yang and Li (1993):

Why should the movement of one commodity be regulated by both the plan and market mechanisms to have planned price and market price? The causes are complicated. On the surface, it is

a system-related phenomenon caused by gradual price reform and an avoidable transitory form from the model of planned prices to the model of market prices. From a deeper point of view, it is an unwillingly adopted method when the level of productive forces is relatively low, the supply of goods is not abundant enough, and shortages are present. . . . Under this circumstance, if the planned prices are given up at one time and market prices all come in, it is inevitable that the aggregate price level will rise up quickly and persistently, so the price reform will not be able to continue and the whole national economy will be trapped in chaos. (Yang and Li 1993, 17)

Yang and Li even went further to point out that the DPS was adopted only because of economic shortages. This is quite different from the current belief that the DPS was adopted to balance vested interests and new market forces. It means that the DPS was adopted because it would avoid catastrophic consequences; in other words, it was adopted because it entailed efficiency gains. Twenty years later, it may not be that important to pin down the causes that led to the adoption of the DPS. The interesting lesson is that political compromises can be congruent with economic efficiency. This can be the case when the uncompromised victory on either side of the political divide would lead to potential efficiency losses. In the case of China, the unilateral victory of the vested interests would imply the halt of the price reform, and the unilateral victory of the radical camp would lead to hyper-inflation. This was why the DPS became an efficiency-enhancing political compromise.

It is worth noting a critical difference between China's dual-track price reform and the partial price reform conducted by Gorbachev in the Soviet Union in the 1980s. The Soviet Union also adopted a dual-track approach; markets were allowed in addition to plans. However, unlike China, the Soviet government was unable to enforce the planned quotas, and all enterprises opted to sell their products in the market. This hurt the state-owned enterprises that were confined to the planned track to buy material supplies. Since their number was large in the initial stage of reform, economic output fell. Murphy, Shleifer, and Vishny (1992) thus believed that partial reforms were not sustainable and that a full-blown reform was a better choice. In view of the Soviet experience, the relatively good enforcement of the planned quotas helped China to avoid the pitfalls of partial reforms.

The second efficiency gain of the DPS; that is, allowing the market to work at the margin, is best illustrated in Figure 9.1, which is adopted from Figure 4.1 in Zhang (1997). Using a simplistic case of the production of two goods, X and Y, Figure 9.1 illustrates Pareto efficiency; that is, a state where the potential gains from trade are exhausted. For a given set of inputs, there is a tradeoff between the production of X and Y. The production possibility frontier represents the most efficient way to produce combinations of the two goods. There are several such combinations. In a general equilibrium framework in which no production quotas and price control exist, the market outcome is determined

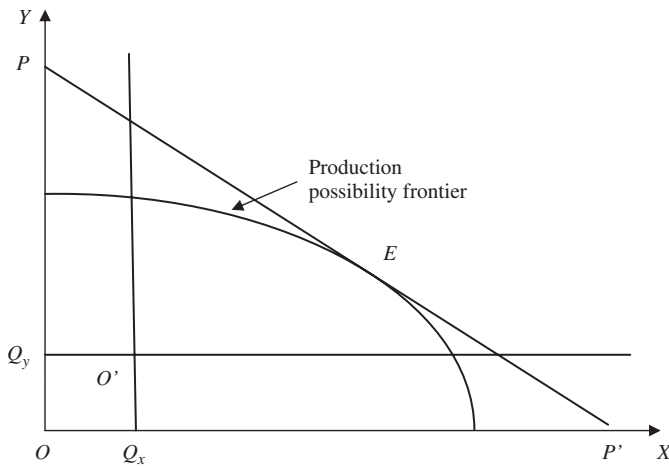


FIGURE 9.1 Pareto efficiency of the DPS

Source: Zhang 1997, 150, Figure 4.1.

by tangent point E between the production possibility frontier and the price ratio, shown by line PP' in the figure, between X and Y . At E , the marginal rate of technical substitution between X and Y equals the ratio of their prices; hence, Pareto efficiency is reached. It turns out that the DPS does not affect the obtainment of this efficiency when the planned quotas are not binding. In the figure, Q_x and Q_y are the planned quotas for X and Y , respectively. They are smaller than the amounts of output of X and Y at E . The critical point here is that the quotas do not affect the production possibility frontier, and the market equilibrium at E is kept intact.⁵ In effect, the quotas are equivalent to moving the two axes inward so the origin becomes O' with no other changes.

The above discussion shows the essence of the DPS; that is, it allows the market to set the prices at the margin while preserving some of the plan. Because the behavior of economic agents is determined by price signals at the margin, Pareto efficiency is obtained under the DPS. The only difference from a free market is that firms get less on their quotas. As the 1985 debate on agricultural prices shows, few economists at that time fully understood that economic agents respond to price signals at the margin. Therefore, we have reason to believe that neither the young economists in the Moganshan Conference nor the government officials who enacted the price reform policy for the “Decision for

5. This is a simplified statement. The relative price line PP' may change in a general equilibrium framework. However, the market outcome is still the tangent point between PP' and the production possibility frontier although it may not be an exact E in the figure.

Economic System Reform” were concerned with efficiency. This is another example of Chinese pragmatism. People were aware that the old system did not work and steps had to be taken to replace it. The DPS was chosen as both a political compromise and a way of avoiding dramatic inflation without anyone taking into consideration its textbook efficiency implications. This is where Chinese pragmatism was so effective—small steps of improvements lead to large efficiency gains over time, although the exact route to efficiency is unknown at each step.

9.2.2 Potential Losses

Figure 9.1 shows that Pareto efficiency can be reached in production under the DPS when the planned quotas are not binding constraints for enterprises. However, in reality, planned quotas could become binding constraints. That is, enterprises might have to produce more than they want to, which would entail a loss of efficiency. We refer to this problem as “overproduction.” On the other hand, enterprises might find that their quotas of material supplies are smaller than what they want to buy. This is more likely to happen when the economy is characterized by serious shortages. However, most firms could solve this problem by buying material inputs in the market. Potential efficiency losses are most likely to occur when the quotas are misallocated to firms that do not need the amounts of material supplies specified by the quotas. We refer to this problem as “mismatch.”

Lau, Qian, and Roland (2000) studied the two abovementioned issues and demonstrated that the DPS can still be Pareto improving over planning if selling and buying the right to quotas were allowed. The idea is simple. If a firm finds that it is required to produce more than it wants to, it can buy from the market the right to not produce the extra amount of product. That is, it can pay other firms to produce the extra amount of product as long as the market is sufficiently large. This solves the problem of overproduction. The mismatch problem can be solved in a similar way; that is, enterprises having more material quotas than needed can sell their extra quotas in the market. Therefore, Lau, Qian, and Roland called China’s dual-track approach a “reform without losers.”

However, Lau, Qian, and Roland’s argument relies on the assumption of the existence of perfect markets. When markets are not perfect, the DPS may entail efficiency losses. This can happen when the market is not frictionless, and it is costly for firms to trade their quotas. It can also happen when quotas of certain material supplies are concentrated in the hands of a limited number of enterprises that do not need the amounts of supplies specified by their quotas. These enterprises acquire monopolistic power over their quotas and the quota prices are higher than what the society desires. Unfortunately, this was often the case in the 1980s. *Guandao* were often government officials and SOE managers who controlled excess quotas.

This leads us to the second shortcoming of the DPS, which was rent-seeking and corruption. Lau, Qian, and Roland implicitly assumed that a market existed for the trade of quotas. This type of market did exist; however, it was not an open market but one that hid behind the scene involving the exchanges of official privileges and personal gains. In practice, an open market was impossible because if it had been allowed, most quotas would have been on sale since the gap between the planned track and market track was large. Indeed, allowing such a market would have led to a situation similar to that witnessed in the Soviet Union under Gorbachev's partial reform. That is, all enterprises would divert their products to the market track, potentially leading to a collapse of the economy. With the absence of an open trading market for quotas, rent-seeking became a way to obtain cheap material supplies. The prevalence of *guandao* was one of the reasons for the Chinese government to give up the DPS.

9.3 ACHIEVEMENTS OF THE DUAL-TRACK PRICE SYSTEM

Initially, the DPS was designed as a transitory step toward the full market. In its 10 years of existence, it fulfilled this initial goal although it took longer than what was initially conceived to converge to the market. Of equal importance, the DPS has also brought about several unintended achievements, among which facilitating the SOE reform and the rise of the non-state sector were the two most significant. This section provides an account of those three accomplishments.

9.3.1 Converging to the Market with Macro Stability

The first accomplishment of the DPS was that it successfully reformed one of the two pillars of the planned economy; namely, price and quantity control, without disastrous consequences that were experienced by other transition countries adopting the big bang approach to reform. This accomplishment was only partially intended. It was intended because the objective of the DPS was to serve as a bridge between a planned economy and a market-based economy. It was unintended because it prevented hyper-inflation and macroeconomic instability, which were not clearly thought of as possible consequences of the price reform when the DPS was adopted.⁶ Although the supply school had emerged and begun to exert policy impacts in the developed countries, the first set of modern economic theories introduced in China in the early 1980s were Keynesian. Expansionary policies were believed to have uniformly positive effects on the economy.

6. Wu Jinglian is one of the few economists who realized that China's distorted economic structure under socialist planning, in which shortage was the main theme, had a constraining effect on economic reform. See the next section for more discussions.

Neither scholars nor government officials fully understood the theoretical underpinnings and empirical consequences of Keynesian economics. One of the consequences of this insufficient understanding was the lack of sensitivity to inflation. The dominant theory among reformist economists was that inflation was an unavoidable by-product of economic reform and economic takeoff.

The Bashan-Lun Conference was an important juncture for Chinese scholars to realize the dire consequences of inflation. This conference was held on the tourist ship Bashan cruising down the Yangtze River from Chongqing to Wuhan from September 2 to 5, 1985. Like the Moganshan Conference, the Bashan-Lun Conference has become a legendary moment in China's reform history. The 1980s witnessed a positive and fruitful interaction between scholarly debates and government policymaking. These two conferences were the climax of such interaction. Like the Moganshan Conference, the Bashan-Lun Conference was also organized by government agencies, but attended mostly by scholars. Unlike the Moganshan Conference though, it invited a dozen foreign experts, including Janos Kornai and Nobel laureate James Tobin, to hold discussions with the Chinese scholars. The theme of the conference was macroeconomic management in China. Among many things, the Chinese participants learned from the foreign participants that inflation was not a tolerable by-product. This alerted the Chinese economists to treat the on-going inflation seriously.

However, it took a while for this awareness to reach the policymakers. The initial strategy of the DPS was still to quickly converge to the market track. This was partly due to the lack of understanding of the relationship between price reform and inflation, but mostly because of the ignorance regarding the dire consequences of inflation. In 1986 and 1988, the central government made two attempts of *jiage chuanguan* (breaking the price fortress), both of which contributed to fuel the already hot economy. The second attempt sent the economy to the climax of the first inflation in the history of the People's Republic that was part of the reasons for the 1989 student movement and caused the dismissal of the Zhao Ziyang government.

The relationship between the DPS and macroeconomic stability should be understood from both sides. Prices would definitely increase when they were liberalized in a shortage economy. The DPS allowed prices to increase gradually over a sufficiently long period. In addition, it reduced the supply-side pressure of inflation by encouraging production. Therefore, the DPS contributed greatly to prevent hyper-inflation. On the other hand, the dismissal of the DPS could only be carried out when macroeconomic conditions were stable. As indicated in the last section, the track gaps were large when the economy was overheating, making convergence very difficult. Only in the early 1990s, when the economy became stable and even dived into recession was the convergence made possible. Therefore, the DPS and macroeconomic stability reinforced each

other. This reinforcement is an example of the institutional complementarities that we discussed in Chapter 6. In retrospect, we have to be grateful for the wisdom of the young economists attending the Moganshan Conference; their wise choice of the DPS has sent China on to the road of reform to increase gains and reduce losses. In contrast, the choice of the big bang approach in the former Soviet Union and Eastern European countries has sent those countries into long economic contraction and macroeconomic instability. In the next section, we will discuss why China and the former Soviet Union and Eastern European countries adopted different approaches.

9.3.2 SOE Reform

In the early 1980s, there was a debate, mainly between two former classmates, Li Yining and Wu Jinglian, on the sequence of economic reform. Professor Li insisted that SOE reform was the central theme of economic reform and should precede price reform because he believed that reforming the ownership structure was the most fundamental task to transform the Chinese economy from a socialist planned to a socialist market economy. In the 1986 article “Basic Thoughts on Economic Reform” (Li 2005), Professor Li wrote in a somber tone:

Economic reform may fail because of the failure of price reform, but the success of economic reform does not depend on price reform; instead, it depends on the ownership reform, that is, enterprise reform. This is because price reform mainly creates for economic reform an environment conducive to the development of the commodity economy, but ownership reform or enterprise reform truly touches the issues of interests, responsibilities, stimulation, and incentives. (Li 2005, 52)

For enterprise reform, Professor Li advocated using shareholding as a way to reform the SOEs. Here, shares may not necessarily be held by private agents, but, as Professor Li promoted, can be held by other SOEs. In effect, what Professor Li advocated is close to the industrial structure under the main bank system in Japan. For his promotion of using shareholding as a way to reform the SOEs, Professor Li earned the popular title of *Li Gufen* (Shareholding Li).

In contrast, Professor Wu insisted that the ownership reform would inevitably fail before the economy overcame serious shortage and a functioning market was established to allow prices to reflect economic scarcities. In a paper first published in 1985 (written in 1982) and later included in a book (Wu 1987a), Professor Wu gave three specific reasons why the ownership reform was premature at that time:

“First, it is difficult for the law of value to effectively exert its positive impacts on production and management in the short run under the condition that the (economic) ratios are highly distorted and demand is far larger than supply” (Wu 1987a, 191). Here,

Professor Wu resorted to the same argument that he used for a gradual approach to economic reform; that is, the economy was characterized by serious shortage.⁷ When serious shortage exists, “even enterprises are allowed to have some autonomous rights in buying materials and selling products and prices are allowed to float, it is not possible to force enterprises to improve production and management; on the contrary, markets and prices will be more volatile because of the elimination of administrative controls, and it is even possible for phenomena such as hasty buying, arbitrage, and hyper-inflation to happen” (Wu 1987a, 192). That is, there was easy money in the economy and enterprises would not have any incentives to improve their efficiency even if they were reformed in some way.

“Second, under the circumstance of seriously distorted (economic) ratios and abnormal supply of materials and energy, it is difficult to place precise monitoring and provide reasonable awards and punishments to enterprises by introducing the mechanisms of balanced accounting and self-responsibility of profits and losses” (Wu 1987a, 193). Professor Wu rightly pointed out the information problem embedded in a distorted economy. When quantity controls prevailed to handle shortage, it was difficult for the government to distinguish between the negative effects of the controls and the lack of action on the part of the managers. Therefore, enterprise reform—at the time, mostly contracting—would not improve efficiency.

“Third, under the circumstance of seriously unbalanced fiscal budget, a small fiscal reserve, and even a considerable deficit, it will encounter fairly large difficulties and obstacles to make large adjustments to the interest relationship among people” (Wu 1987a, 193–194). It seems that Professor Wu elicited this reason merely to answer Professor Li Yining’s assessment that ownership reform materially affected people’s interests. Ownership reform, either contracting in the 1980s or privatization in the 1990s, was not a free lunch for the government. It created winners and losers and required that the government compensate the losers, who sometimes were part of the governments at various levels. However, government budget was tight in the 1980s and therefore, it was difficult to conduct the ownership reform.

Professor Wu advocated establishing the market and adjusting the economic structure to eliminate shortage before enterprise reform or any other serious system reform was attempted. Later, especially during the market-versus-planned debate after the 1989 Tian’anmen Event, he became a strong proponent of the market. For that, he earned the popular title of *Wu Shichang* (Market Wu).

In retrospect, however, we find that the price reform and the SOE reform went hand in hand and reinforced each other in the 1980s. As we pointed out in the previous

7. We will elaborate Professor Wu’s argument in the next section.

chapter, the SOE reform was initially inspired by the success of the rural reform and took the form of manager contracting. Although it was less dramatic than envisioned by Professor Li, empirical studies find that contracting enhanced the incentives of the SOE managers to pursue profits (Groves et al. 1995; Li 1997). However, contracting would have hardly had any effect on SOE managers if the planned economy was still in place. At the minimum, SOE managers needed to have the freedom to choose what and how much to produce. Therefore, contracting was inevitably accompanied by the decentralization of decision making. However, contracting is not sufficient to gain social efficiency even if SOE managers become full profit maximizers. A functioning market is needed to provide price signals for the most efficient allocation of resources and production. When prices are fixed by the planner, static allocative efficiency can be obtained if SOE managers allocate resources to reflect the scarcities represented by the prices. However, various shocks will occur with the passage of time to change the relative scarcities among commodities. The most obvious shocks are natural disasters and fluctuations in the external markets. Less obvious are the different rates of technological progress in different sectors. It is hardly possible for the planner to collect all the necessary information to make the right adjustments to the prices. Only a decentralized market can accomplish this formidable task. The DPS provided a market with limited coverage. However, this was sufficient to allow price formation because economic agents respond at the margin. This in turn enhances the SOE managers' incentives to chase the most profitable opportunities. Therefore, the DPS bolstered contracting, and for that matter, other more radical measures, as ways to reform the SOEs.

On the other hand, SOE reforms also facilitated the convergence of the DPS to the market track. Those reforms gave SOE managers more autonomy who would then attempt everything, legal or illegal, to sell in the market track because prices in the market track were much higher than those in the planned track. This exerted a huge pressure on the government to unify the two tracks to avoid corruption and supply diversion, which was observed in the former Soviet Union in response to partial reform. Professor Wu Jinglian's argument for setting up the market first had strong theoretical and historical underpinnings. Professor Li Yining's argument for reforming the SOEs made practical sense for partial reforms to succeed. The two reforms reinforced each other once both were implemented.

9.3.3 The Rise of the Non-state Economy

The most significant unintended accomplishment of the DPS was the rise of the non-state economy. It was unintended because neither collective firms, in particular, TVEs, nor private firms were envisioned as an integral part of the Chinese economy. Under the planned economy, both material supplies, including bank credits, and the product

market were controlled by the central government. There were non-state firms in the planned period, but most of them had to rely on materials leaked from the SOEs to sustain their production, so their growth would be ultimately limited. The DPS, by opening up the market, allowed these firms to tap into the sources originally controlled by the plan and thus gave them scope to survive and flourish.

In addition to fostering the growth of TVEs and private firms, the DPS also helped the smooth implementation of China's open-door policy. Foreign direct investment (FDI) began to enter China toward the end of the 1970s. Part of the market of the FDI firms was outside China; in fact, the Chinese government required that they sold most of their products outside China. Therefore, the government had to give them the right to set the prices of their products. In addition, many of their inputs were imported so it was difficult to plan their material supplies. The DPS solved the problem by allowing FDI firms to go along the market track.

The DPS also helped China to form and implement the export-led growth strategy. Between the early 1980s and 1994, China maintained dual exchange rates. The renminbi (RMB) was more expensive under the official rate than under the market rate. Non-commodity trade and capital flow were subject to the official rate; most commodity trade was initially subject to the official rate but gradually moved to the market rate. Firms and localities were given quotas for their export revenues to be exchanged in the foreign exchange swap markets. The special economic zones and provinces with more exports were given more quotas. That is, the DPS was a rewarding mechanism to encourage more exports. Moreover, goods were often directly priced lower in the international market than in the domestic market to enhance their international competitiveness. The aim at the time was to draw as much foreign earnings as possible. This was practical because China was seriously constrained in capital supply but importing foreign technologies was vital for its modernization. In fact, the DPS only made sense under the constraint of foreign exchange shortage because otherwise the single market exchange rate should have been adopted if its only purpose had been to encourage exports. Of course, this mercantilist approach also had drawbacks, which have been no more evident than in the problems caused by China's burgeoning foreign reserves. We will discuss this in greater detail in Chapter 11.

However, a question remains regarding the necessity of the DPS to give rise to the non-state economy: Would it not be more productive to establish the market at one time? This is a legitimate question because in theory, at least as envisioned by the proponents of the big bang approach to economic reform, the DPS is dispensable with regard to the emergence if the market can be established overnight. However, this argument fails where the big bang approach has failed in reality—the market cannot be established overnight. This leads us to the causes of the DPS and why it has succeeded in China.

9.4 CAUSES OF THE DUAL-TRACK PRICE SYSTEM AND FACTORS LEADING TO ITS SUCCESS

What led China to adopt the DPS and why has it succeeded? Answering this question actually provides a clue to the more general questions of why China adopted a gradual approach to economic reform and why this gradualism has succeeded. In this section, we first provide a review of the existing explanations offered by contemporary writers and then probe into the writings of Professor Wu Jinglian in the early 1980s. With China on the brink of economic reform, Professor Wu was in a better position than the later writers in observing the constraints faced by the reformers at the time and thus might offer a better explanation for the causes that led China to adopt the gradual approach. We focus on the causes of the DPS and gradualism in general because causes often bring to light the factors that contribute to the success (or failure) of an event.

For contemporary explanations to China's gradualism, the most complete review by far has been offered by Zhang (1997). These explanations can be grouped into four categories concerning the initial conditions, learning in market formation, slow entry of private firms, and the political economy of reform. We describe them in turn.

Among the explanations concerning the initial conditions, those provided by Qian, Roland, and Xu (2006) and Sachs and Woo (1994) are the two most widely recognized. As discussed previously, Qian, Roland, and Xu (2006) traced the cause of China's gradual approach to what they call the M-form of organizational structure existing in China's planned period. In other words, the M-form of organizational structure is one dominated by *kuai-kuai* (localities), instead of *tiao-tiao* (line ministries). They showed that it is more cost effective for an M-form organization to adopt a gradual approach when it is about to start experimenting with new methods of doing things. While it provides interesting insights into the distinctions between the M-form and U-form organizations, this explanation remains a normative argument for China's adoption of the gradual approach. In this regard, Sachs and Woo's explanation provides a more positive argument. They emphasize that China was basically a rural economy and was characterized by the Lewisian dualism when reform started. Thus, China's backwardness was advantageous because any progress in agricultural productivity and the migration of farmers to non-farming occupations would be Pareto improvements, that is, improvements that would benefit everyone. Therefore, China could afford to start its reform gradually, first in agriculture and later allowing the non-state economy to emerge at a controlled pace. However, this was hardly possible for Eastern European countries and the Soviet Union because they were already industrialized nations. Although this explanation sounds plausible with regard to the biggest difference

between China and other transition countries, it fails to provide the mechanism that links backwardness to gradualism. China's gradual approach has certainly benefited from its being backward, but being backward does not necessarily lead to a gradual approach to reform. In the end, Sachs and Woo's explanation is still more normative than positive.

The second set of explanations believes that market formation is a learning process and it takes time for people to learn how to run a successful market (Murrell 1990). This does not mean that people in transition countries did not know how a successful market should appear; it means that the transition from the planned socialist economy to the market-based economy was constrained by the old socialist institutions and their ramifications and it took time for those institutions, especially the set of informal ones, to evolve toward the market. In Douglass North's words, "history matters." This line of thinking rationalizes the gradual approach, but it seems to require too much rationality on the part of the reformers; they had to be sufficiently farsighted to envision all the difficulties on the road to reform and confident enough to believe that the gradual approach would lead to the desired outcomes.

Related to the second group of explanations, the third set suggests that private firms would not automatically emerge as a result of quick market reforms and the original SOEs might become monopolistic firms. Zhang Jun is one of the economists who hold this view:

In fact, our study finds that although continuous "entry" of new firms would form a kind of "discipline" to constrain these monopolists, because of the incompleteness of the capital market at the initial stage of reform, this kind of "entry" would become difficult and slow. According to this view, a reasonable reform approach should be to gradually reduce the state sector's reliance on the plan, and at the same time to expect the development and entry of the non-state economy. Therefore, for the "gradualist," the success of China's economic reform is more the result of successfully "deploying" a practical gradual reform strategy, and should not be ascribed to China's unique starting point of reform. (Zhang 1997, 295)

However, similar to the second group of explanations, this view accords high rationality on the part of the "gradualist" because it assumes that the gradualist knew the sequence of reform from the beginning. To a large extent, this is ahistoric because as we showed in Section 9.1, the reformers, such as those young economists attending the Moganshan Conference, did not have a clear idea of the sequence of reform.

Explanations about the political economy may be more pertinent than the above three sets of explanations in that they place the causes of the DPS and gradualism in China's historical context. For a long time into the reform, there were groups of people who benefited from the planned economy. They tended to be government officials who

had control over the plans and SOE managers and employees in heavy industries. In addition, there were people who truly believed in a planned economy and were prepared to fight for its survival. All these people were powerful in influencing the government. In order to avoid their opposition, reforms had to find ways to make Pareto improvements; people with material gains from the planned economy would be happy to accept more benefits and people believing in the planned economy could not reject the change in the face of universal improvements. It is in this sense that Lau, Qian, and Roland (2000) call the DPS a “reform without losers.”

In addition to the political economy consideration though, there might be efficiency considerations that scholars and policymakers realized before the reform began. Wu Jinglian was one such scholar. In an article first published in 1981 (written in 1980) and later included in a book titled *Explorations on Issues of Economic Reform*, Wu Jinglian provided a systematic theory that links China’s economic reform strategy to the distorted economic structure that China inherited from the planned period. He summarized the distortions as follows:

The sectors in the national economy are out of order; their ratios are highly distorted. Agriculture and light industry seriously lag behind and cannot meet the need of raising people’s living standards. Heavy industry has redundant capacities but is not advanced, and unable to fully assume the dominant function. Infrastructure is very weak and hampers the development of industry and agriculture. The ratio between accumulation and consumption is not appropriate; the size of investment surpasses the fiscal, material, and human capacities the society can provide (Wu 1987b, 160).

Professor Wu linked those distortions to the way that socialist planning organized the economy, for which Professor Wu summarized three key characteristics, all related to the over-concentration of economic activities. First, the planned system rejected the market so people’s needs could not be reflected in time. The consequence was that production was delinked with demand. Second, because the market was absent, there was a lack of automatic adjustment in production. As a result, the ratios between sectors became inappropriate. Third, the planned system restricted the incentives of enterprises and ordinary people to fully utilize their potential.

Because the planned system had led to the failure of the Chinese economy, it seemed natural to propose that the economic system reform was the most important task for China if it wanted to get on the track of fast economic growth. However, Professor Wu rejected this assessment, but instead stated his famous proposition: “The overall harmonization of the ratio relations is the precondition for conducting a fundamental reform of the economic system.” While he did not reject reform, Professor Wu believed that the proponents of radical reforms did not realize the other side of the problem:

“When the ratio relations are seriously disarrayed, the condition for large and comprehensive system reforms is not ripened. If we forcefully start large and comprehensive reforms, we will not only be unable to obtain good results, but also create bad economic and political consequences” (Wu 1987b, 168). In retrospect, Professor Wu’s wisdom must be given its due credit. Indeed, the two attempts of *jiage chuanguan* in the 1980s caused serious inflation and contributed at least partly to the end of Zhao Ziyang’s political career.

Professor Wu provided three reasons in defense of his proposition; they largely overlapped with the three reasons used by him to refuse enterprise reform before a fully functioning market was established. The first was that the market mechanism could not fully function when there was overall and serious shortage. The second was that it was difficult to monitor enterprise performance when material and energy supplies were highly limited. The final reason was that enterprises could not fully utilize their autonomy even when they were allowed to when the economy was characterized by serious distortions.

However, Professor Wu did not oppose reforms. Instead, he believed that reforms could facilitate structural adjustment. For that, he distinguished two groups of sectors for which reform measures should be different. The first group of sectors included those characterized by serious shortages. The state should still control their prices but at the same time, transition from direct management controls to using taxation and other indirect measures to regulate enterprises. The second group included sectors that had slack market conditions. For them, the government should open up the market and allow enterprises to sell their products. The market would digest the redundant capacities in these sectors and induce enterprises to care more about profits than outputs. Clearly, what Professor Wu proposed was the germ of the dual-track approach. Although he did not propose two parallel prices for one good, his idea of opening up the market sector-wise fits into one kind of dual-track price reform, that is, *kuai-kuan*-based dual tracks (Yang and Li 1993).

The dual-track approach proposed by Professor Wu was rooted in his analysis of the distorted economic structure China inherited from its planned period. He might have touched the true cause of the DPS and gradualism in general, which was to avoid serious economic disorder amidst widespread shortage in the economy. This was consistent with the pragmatism that the CCP has long held in its approach to making decisions. The party realized that something was wrong with the old system and that some action had to be taken to improve upon it. With a vague idea of the direction China should head in, the reform path was mainly shaped by efforts trying to break the immediate constraints and avoid immediate crises. The combination of the willingness for changes and prudent approaches has been the key to China’s successful gradual reform.

9.5 CONCLUDING REMARKS

The DPS served as a bridge for China to peacefully transform from a planned economy to a market-based economy. In its 10 years of existence, it also brought about many other positive consequences, especially the SOE reform and the rise of the non-state economy. This largely explains why China has not been trapped in partial reforms. According to many critics, partial reforms would either create vested interest groups who would oppose further reforms or would complicate the economic mechanism by accumulating layers of distortions—partial reforms themselves create distortions and to overcome those distortions, new distortions have to be created. The key factor ignored by these critics is that partial reforms also create positive feedback pushing toward the market-based economy. This positive feedback is mainly represented by new elements brought about by partial reforms. It has no ties to the old system and will only gain by asking for more market. Often, it becomes stronger with time because the market provides ample opportunities for them. This is a good example of the institutional complementarities that we discussed in Chapter 6.

The DPS also serves as a good example to show how volitional pragmatism has worked in China. The Chinese leadership was not without a vision about China's future at the time when economic reform started. However, this vision was not fixed, but dynamic, adapting to the changes on the ground. China approached reform in a piecemeal manner to overcome the immediate constraints and avoid immediate crises. The reform trajectory was not linear—certainly not optimal, but its accumulative effects are astonishing. After 30 years, China has basically completed its economic reform, while maintaining an annual GDP growth rate of 9.7%. A combination of patience, wisdom, and practice has enabled China to achieve this remarkable success.

CHAPTER
10

Opening up and Its Consequences

In China's public discourse, opening up is always associated with reform. This is primarily because of two facts. The first is that China was a closed society before economic reform began, and the second is that opening up happened immediately after the rural reform started. In as early as the 1980s, China set up four special economic zones (SEZs), which soon became windows for the Chinese people to reach the outside world and reform templates, for other regions to imitate. In 1985, the Shenzhen SEZ decided to adopt the export-led growth model. In 1987, "international circulation," that is, participating in the international division of labor and development of the coastal region were adopted as a national strategy. China as a whole embarked on the road of the export-led growth model. Joining the World Trade Organization (WTO) in 2001 completed China's integration into the world economy. Today, China's trade/GDP ratio is 0.62. As compared with the United States that has a trade/GDP ratio of 0.31, China is a very trade-dependent economy. The international trade-political landscape has changed. While the developed countries are trying to slow down the pace of trade liberalization, China is becoming the champion of free trade. In addition, China has been the second largest recipient of foreign direct investment (FDI) in the world and the largest among developing countries. That is, China is not only open to foreign trade but also to international capital. This is amazing when one realizes that until very recently, China has been a closed society for most of her history.

However, opening up had also raised serious concerns in China. One purpose of setting up the SEZs and attracting FDI has been to use them as learning venues for China to upgrade her own technological capacities. However, the success of this strategy has not been clear in many cases and the debates have been unending. The same thing has been observed with regard to international trade. Scholars and policymakers in

China are worried that Chinese exports are so limited to labor-intensive industries that China would get trapped in the lower end of the international division of labor. In addition, opening up has been concentrated in the coastal region and has exacerbated the disparities between coastal and inland provinces. Although this type of concentration is economically pragmatic, widened regional disparities have led to serious political ramifications that the central government simply cannot ignore.

In the first three sections of this chapter, we will review three key steps in China's economic opening up; namely, the SEZs, the export-led growth strategy, and accession to the WTO. Along with the review, we will discuss the rationale behind these steps, the debates surrounding them, and the consequences arising from them. Then, in Sections 10.4 and 10.5, we will discuss the impacts of opening up on domestic technological capacities and regional disparities. Section 10.6 closes the chapter.

10.1 THE SPECIAL ECONOMIC ZONES

When they were first established, the SEZs had special implications for China—they were experimenting with the capitalist ways of doing things in a country that was an archetype of traditional socialism. The credit for this transformation must be attributed to Deng Xiaoping's visionary decision. In April 1979, Deng Xiaoping met the leaders of Guangdong Province to discuss how to increase economic opening up in the province. After listening to the Guangdong leaders' report, Deng proposed that Guangdong "set up a special zone—take a place out, call it special zone. In the past, the Shan-gan-ning peripheral region was a special zone. The central government does not have money. You are on your own to create a hard road" (Yu 2000, 2). Then, in August 1980, after serious investigations and discussions with Guangdong and Fujian, the National People's Congress (NPC) formally approved the State Council's proposal to set up four SEZs in Guangdong and Fujian. Among these, Shenzhen, Zhuhai, and Shantou are located in Guangdong, while Xiamen is located in Fujian. All these zones have geographic advantages or close ties to the Chinese diaspora. Shenzhen and Zhuhai are two border towns adjacent to Hong Kong and Macao, respectively. Shantou is a famous emigrant city, and Xiamen is close to Taiwan.¹ Clearly, the central government intended to use these four SEZs to experiment with the capitalist ways of doing things as well as to attract overseas investment. This is reflected in the three features that defined the SEZs. As compared with other parts of China, the SEZs would enjoy more autonomy in decision making, concentrate on attracting FDI, and build an export-led economy.

1. In fact, in addition to experimenting with the opening-up policies, the SEZs were established to prepare for Hong Kong and Macao's return to China and reunification with Taiwan.

10.1.1 Preferential Policies and Reforms

Consistent with the above three features, the SEZs enjoyed special treatments granted by the central government. Most of these treatments have become standard policies applied to all regions; their first application in the SEZs was thus a reform experiment. However, there were also a small number of treatments that were unique to the SEZs at the time and later became a contentious issue. Yu Keping summarizes the special treatments in seven aspects (Yu 2000), most of which later became standard policies extended to all regions.

The first was that the process of *shenpi*, that is, the process of granting licenses to new firms, was dramatically simplified and a limit was set for the duration of the process. In the late 1990s, this became a standard reform measure in Premier Zhu Rongji's initiative to downsize and streamline the government. The second was concerned with land use rights. The tenure of land leases was extended to 30 years for industrial purposes; 20 years for tourism, services, and agricultural purposes; and 50 years for residential, educational, and health care purposes. At present, the tenure is uniformly set to 70 and 30 years for non-farming and farming purposes, respectively.

The third was related to the management of foreign earnings. The FDI firms, including solely foreign owned, joint ventures, and Sino-foreign cooperatives, could retain all their foreign earnings; domestic firms engaged in international trade could retain part of their foreign earnings. This policy was gradually extended to other parts of China. First, large firms gained the right to directly export and import without passing through the state-owned trading companies. Later, the monopoly of the trading companies was eliminated and the right to directly export and import was granted to all firms. The fourth preferential treatment enjoyed by the SEZs was that foreign investors could obtain multiple-entry visas. The fifth was with regard to the local banking sector. The SEZs were allowed to set up regional banks and the savings they obtained would not be transferred to other parts of the country. In addition, foreign banks could set up branches in the SEZs. That is, the SEZs were the first to open up the financial sector to foreign banks. Later, this was also adopted in Pudong, the area designated as a special zone in Shanghai. In fact, it was more radical in Pudong because foreign banks were allowed to conduct RMB businesses. Then, in 2006, five years after accession to the WTO, China fulfilled its promise to fully open up its financial sector. The sixth preferential policy allowed FDI firms the privilege of not being subjected to the labor management rules applied to SOEs. This gave them greater flexibility in labor hiring and drastically reduced their labor costs. In the initial years, labor costs usually comprised only 10% of the total cost (Wong 2000).

Perhaps the most important preferential treatments enjoyed by the SEZs were in the area of taxation. Exports were exempted from export duties, and imports other than

tobacco and alcohol were exempted from import tariffs. Enterprise earnings were exempted from corporate income taxes, and the foreign nationals (including people from Hong Kong, Macao, and Taiwan) working in the SEZs enjoyed a reduction of 50% in their personal income taxes. These policies created a tax heaven in each SEZ and were initially intended to encourage the inflow of FDI and exports, particularly processing trade-based exports. However, they also created opportunities to earn easy money. In the early 1980s, there were few electronic consumer goods in China, but the demand was high. This created a huge incentive for companies in the SEZs to import these goods and sell them outside the SEZs. The SEZs, Shenzhen in particular, became a window for foreign electronic products to flow into China. As a result, Shenzhen had trade deficits in the initial years. For example, its foreign earnings were only 57% of its foreign expenditures in 1984, and this decreased to 48.3% in 1985. In addition, only 20% of Shenzhen's product sales were exports (Wong 2000, 75). In 1985, this led to a serious debate about the merits of the SEZs; even Deng Xiaoping became cautious and said that Shenzhen was still an experiment. However, the debate served as a catalyst for the new Shenzhen leadership to emphasize on building an export-led economy. This turn of events paid off. Shenzhen's exports increased dramatically and reached an astonishing level of one seventh of China's total exports by the mid-1990s (Yu 2000, 6).

In summary, most of the preferential policies enjoyed by the SEZs were experiments for later and large-scale reforms. Setting up the SEZs was one of the steps involved in China's gradual approach to reforms. The uniqueness of the SEZs as experimental sites was that they directly introduced capitalist elements into economic management and directly opened up to the outside world. Their success or failure, therefore, would largely determine whether a full market economy would be the goal for China's economic transition.

10.1.2 Achievements and Impacts

The SEZs have achieved tremendous success, particularly Shenzhen that has, in less than 30 years, metamorphosed from a small border town of 30,000 people to a major city housing 10 million residents. No other city in the world has achieved this. Between 1980 and 1999, Shenzhen maintained an annual average GDP growth rate of 31.2% (Yu 2000, 5). During the same period, its export increased by an average annual rate of 42% (*ibid.*, 6). It has also successfully attracted large amounts of FDI. By 1998, FDI firms contributed to 76.7% of Shenzhen's total industrial output (*ibid.*). Today, visitors to Shenzhen are impressed by its numerous skyscrapers, beautiful highways, and vibrant streets. It is a miracle by any standard.

It is noteworthy that all these achievements were obtained with minimal financial support from the central government. Table 10.1, adopted from Ge (1999), lists the shares

Table 10.1 Shares of investment sources in Shenzhen: 1980–1993 (%)

Year	State appropriation	Domestic loans	Foreign investment	Self-raised funds	Other funds
1980	23.9	6.2	43.9	26.1	n.d.
1981	7.6	11.6	51.1	28.7	1.1
1982	7.3	33.2	28.6	27.6	3.2
1983	5.2	37.3	26.6	26.6	4.4
1984	1.4	40.1	18.0	38.2	2.3
1985	1.7	18.6	13.7	57.7	8.4
1986	2.7	13.9	18.6	50.1	14.8
1987	1.3	17.5	16.7	55.5	8.9
1988	0.8	15.8	15.3	49.0	19.1
1989	0.3	11.8	32.0	45.3	10.6
1990	0.5	22.5	34.0	34.3	8.7
1991	0.3	29.9	23.6	36.0	10.2
1992	0.0	30.7	11.8	43.6	13.9
1993	n.d.	19.8	12.9	51.2	16.1

Source: Ge 1999, 64, Table 3.7.

Note: n.a. = not applicable; n.d. = no data available

of different sources in Shenzhen's investment from 1980 to 1993. Except in the initial years (especially in 1980), funds provided by the central government only accounted for a tiny portion of Shenzhen's total investment. By the late 1980s and early 1990s, central government funds virtually vanished. One third of the investment came from FDI in the first half of the 1980s. Overall, self-raised funds were the largest source. Domestic loans also played a significant role.

However, the achievements of the SEZs do not stop at their own rapid expansion and growth. More importantly, they have fulfilled their role of experimental sites for China's economic reform and served to lead China's export-led growth strategy. China's gradual approach to reform has taken two routes. One is via the dual-track system, and the other is via local experiments. While many local experiments, such as the household responsibility system and SOE privatization, were spontaneous and local initiatives, the central government deliberately designed the SEZ experiment with clearly defined objectives. The SEZs were designated "to experiment with the development of an outward-looking, market-oriented economic system, and to serve the country as a 'window' and a 'base' along these lines" (Ge 1999, 49). Chinese pragmatism is not passive but one of conscious explorations and even design. However, unlike the big bang approach, it prefers

piecemeal changes instead of a grand overhaul of the system. This is a very interesting and seemingly odd contrast. The proponents of the big bang approach are adherents of the market doctrines and thus must agree with Hayek that the market is a result of spontaneous order. However, these same proponents fell into the trap of what Hayek called the “fatal conceit” of human rationality. In contrast, pragmatic Chinese leaders, who were mostly genuine believers of socialism, were very moderate in their thinking of what they knew and could accomplish in a short period. This was probably because these Chinese leaders had learned a valuable lesson from the setbacks that grand social engineering brought to China during the planned period; however, the proponents of the big bang approach did not have any real experience with regard to large-scale social engineering. They did not consider the big bang approach as a project of large-scale social engineering; however, in reality, it was. In the short run, the pains and disorder it caused were no less severe than those caused by the socialist experiment.

It was the success of the SEZs that led the central government to determine that the market economy was the aim of China’s economic reform. In the spring of 1992, Deng Xiaoping toured the south to bolster the reform process. When he visited Shenzhen, he said: “I came to Guangdong in 1984. By then, the special economic zones had just started. Eight years passed, I came again. Shenzhen, Zhuhai, and other places have developed so fast; I did not expect it. After seeing these cities, my confidence has increased” (Yu 2000, 4). Deng’s *nanxun* (southern tour) started a new round of reforms in the 1990s. The Chinese Communist Party (CCP) identified building a socialist market economy as its new goal in its Third Plenary of the Fourteenth Party Congress held in 1993. Subsequently, dual-track prices were quickly unified to the market track; private economy was encouraged; SOE privatization was started; industrial adjustment was carried out; government was downsized and administrative procedures were simplified and streamlined; and finally, accession to the WTO marked China’s complete integration into the world economy.

It should not be ignored that the SEZs also led to regional competition. The preferential policies handed to the SEZs prompted other parts of the country to demand similar treatments from the central government. As a result, the central government granted 14 coastal cities the status of coastal open cities (COCs) in 1984. These cities enjoyed many of the preferential policies granted to the SEZs. In 1985, the Yangtze River, Pearl River, and south Fujian deltas were designated as “open areas.” In 1988, Hainan Island was separated from Guangdong Province and was awarded SEZ status. In 1990, the Pudong New Area was created. Inland provinces did not want to be left behind either. By 1992, numerous economic and technological development zones were set up all over the country. These zones enjoyed most of the preferential policies granted to the SEZs. The spread of preferential policies diluted the uniqueness of the SEZs, but the positive

side was that the whole country was moving toward the market and open economy. The SEZs served, albeit in a curious way, as reform templates for other parts to copy.

10.2 THE EXPORT-LED GROWTH STRATEGY

The export-led growth strategy was a result of learning from both the East Asian model and the rapid growth in the SEZs. It was closely tied to a shift in the priority of the central government's policies—from inland provinces to coastal provinces. Two theories formed the foundation for such an uneven development model. In the early 1980s, the gradient theory (*tidu lilun*) was introduced to China and applied to China's three major regions, that is, coastal, central, and western. According to this theory, growth should start from the coastal region, and then gradually expand to the central region, and finally the western region (Wang and Hu 1999). It is essentially an application of the "flying geese" theory to China's regional development. This model was formally adopted by the government's seventh five-year plan that started in 1986 (State Council 1986). In 1988, a more radical theory named "large imports, large exports" (*dajin dachu*) was adopted as government policy, which called for China's coastal regions to participate in the world market via processing trade.

Consistent with the policy shift, the central government began to direct more investment to the coastal region. Table 10.2 provides data related to the shares of the central government's capital investment in coastal, central, and western regions from 1953 to 2005. Four sub-periods—1953–1978, 1979–1991, 1993–1998, and 1999–2005—are compared. While it was already the largest recipient of central government investment in the period 1953–1978, the coastal region became even more favored in the initial reform period of 1979–1991, reaching more than half of the total central government investment, an increase of 14 percentage points over the earlier period. In contrast, the shares of both the central and western regions decreased significantly—the central region by 5.74 percentage points and the western region by 8.26 percentage points. In terms of absolute values, the contrast is even starker. The investment received by the coastal region increased by more than two-fold, but the central and western regions only increased by 89% and 55%, respectively. From 1979 to 1991, the investment received by the coastal region was 1.9 and 2.9 times that received by the central and western regions, respectively. The coastal region clearly dominated central government investment in the 1980s.

The shares of central and western regions increased slightly during 1993–1998, while the share of the coastal region declined. However, the trends were reversed in the subsequent period 1999–2005. The share of the central region declined substantially, while that of the western region was almost unchanged. In the meantime, the

Table 10.2 Central government capital investment by periods (billion RMB and %)

Region	1953–1978		1979–1991		Change from the previous period
	Investment	% of total	Investment	% of total	
Coastal	223.39	39.52	686.28	53.52	14.00
Central	192.21	34.01	362.42	28.26	-5.74
Western	149.64	26.47	233.63	18.22	-8.26

Region	1993–1998			1999–2005		Change from the previous period
	Investment	% of total	Change from the previous period	Investment	% of total	
Coastal	1,003.6	46.51	-7.01	4,696.7	52.94	6.43
Central	690.2	31.99	3.72	2,255.1	25.42	-6.57
Western	464.0	21.50	3.28	1,920.4	21.65	0.13

Sources: Data for 1953–1991 are from Wang and Hu 1999, 176. Data for 1993–2005 are from *China Statistical Yearbook* (1994–2006).

coastal region recovered most of the share that it had lost in the previous period. As a result, the distribution resembled that of the period 1979–1991.

The export-led and uneven development strategy was politically unpopular among the inland provinces. However, the economic rationale was strong and dominated the central government's decision. It had a lot to do with the geographic advantages of the coastal region in terms of access to international markets, historical traits, cultural proxy to overseas Chinese communities, and the concentration of large cities.

In terms of access to international markets, China's coastal region not only has the advantage of good transport facilities but also proximity to Hong Kong, a dynamic and free trade city second only to Tokyo in East Asia. For a long time, Hong Kong has been an important window for Chinese exports. Guangdong is the largest exporter in mainland China, accounting for 30% of China's total exports; 60% of its exports are rerouted through Hong Kong (R. Yang 2006). That is, 18% of the mainland exports are rerouted through Hong Kong. In accordance, 60%–70% of Hong Kong's GDP is tied to rerouted exports from the mainland (Yao et al. 2006). Since one of the major aims of the uneven development model is to experiment with a market-oriented system, learning from Hong Kong became a convenient route toward that goal. The influence of Hong Kong was most evident in the initial stage of Shenzhen's astonishing development.

The roots of the divergence of the Chinese provinces lie, to a large extent, in the history of the nation. Chinese civilization began in the middle regions of the Yellow River in the Loess Plateau. This was followed by a gradual shift in power eastward to the lower reaches of the river in the Song dynasty. The invasion of the northern tribes forced the Song dynasty to move its capital to Hangzhou. The move proved to be decisive for China to move its economic center from the north to the more fertile south. The encounters with the western powers in the 1800s added another advantage to the southern and eastern coasts, which were the access points to the international market. The treaty ports became China's windows to the outside world, the effects of which are felt even today.² The most significant development was Shanghai's fast emergence as the most dynamic city in the Far East. For a long time since the early 1900s, Shanghai had been China's economic powerhouse.

The coast's cultural ties with the overseas Chinese communities proved to be a valuable asset during its early stage of development. The early waves of Chinese emigrants came from a few regions in Guangdong and Fujian Provinces. They brought back a large amount of investment in the early stage of the reform era. Indeed, until the late 1990s, half of China's FDI came from the overseas Chinese population. By the late 1990s, several other sources of investment became significant. One was investment brought back by new emigrants from Zhejiang Province; another was investment brought by Singaporean businesses to Jiangsu Province; and the third was investment brought by Taiwanese businesses to the areas around Shanghai. The transformation of Jiangsu into the second largest exporter in China is greatly related to this new wave of FDI inflow.

Finally, the concentration of large cities along the coastal region serves as large economic magnets to explore the economy of agglomeration. Empirical research finds evidence in China to support the claims of the new economic geography (e.g., Lu and Tao 2007; Chen and Wang, forthcoming). The three large municipalities, Beijing, Shanghai, and Tianjin, are all located on the eastern coast; Guangzhou, the fourth largest city in China today, is located along the southern coast; and the fifth largest city, Shenyang, is close to the sea toward the northeast. In fact, the Chinese economy is heavily concentrated in three regions centered around these large cities; that is, the Pearl River Delta, the Yangtze River Delta, and the Bohai Bay area formed by Shenyang, Tangshan, Beijing, and Tianjin.

There was also strong political rationale for giving coastal regions, the SEZs in particular, preferential treatment. These regions had the largest chance of success in economic reform and would serve as models for other regions. Therefore, it was politically important to increase their chances of success.

2. In an interesting paper, Banerjee, Duflo, and Qian (2005) find that the distance to the nearest treaty port still has predicting power for a county's contemporary growth rates.

The central government could ignore the opposition by the inland provinces also because opening up brought Pareto improvements—the coast gained from it and the inland did not lose from it. This led to overall growth and ultimately enabled the central government to compensate the inland provinces in the late 1990s. In 1999, the “Go West” program was started. Between 2000 and 2005, 70 main construction projects were started, and the total amount of investment reached RMB 1 trillion. More than one third of the funds raised by long-term government bonds for construction were directed into the western region during this period, and the percentage exceeded 40 from 2002 to 2005. During 2000–2005, about 220,000 kilometers of roads were newly constructed in the region; of these, 6,853 kilometers were highways. In addition, 5,000 kilometers of railway was built, and 10 airports were constructed. Among these projects, the Qinghai-Tibet Railway, West-East Power Transmission Project, and West-East Natural Gas Pipeline Project, have become national landmarks.³

While the rest of China was growing rapidly, the Northeast, one of China’s old powerhouses, experienced a sharp decline because of economic restructuring. Industries in the Northeast were overwhelmingly state-owned, resource-based, and lacking new investment and R&D. In the new era of private economy and globalization, these industries lost their competitiveness and entered inevitable declines. A once glorious region became China’s backwater of stagnation and a source of social unrest. Under this circumstance, in 2003, the central government began a program called “Reviving the Northeast” with the aim to revitalize the industrial bases in the Northeast.

The central government set up a special office for each of the two programs and committed a considerable amount of financial resources as well as provided favorable policies to them. However, the positive responses from the central government encouraged the central provinces to demand preferential treatment. This led to the development of the theory of “the falling central.” This theory posited that while the east is forging ahead with all its geographic and policy advantages and the west and the northeast are getting preferential policies and money from the central government, the central provinces—Shanxi, Henan, Anhui, Hubei, Hunan, and Jiangxi—do not receive any benefits from the central government and are thus falling behind. This theory was used by the central provinces to ask for support from the central government. In April 2006, the central government, in its tenth directive of 2006, finally pledged to give the central provinces more support and to set up an office in the National Development and Reform Commission to lead the efforts.

The export-led growth strategy paid off; the volume of China’s exports increased at an exponential rate. In 1978, China only exported 9.75 billion dollars of goods. Ten years

3. Data in this paragraph have been taken from Yao (2008a).

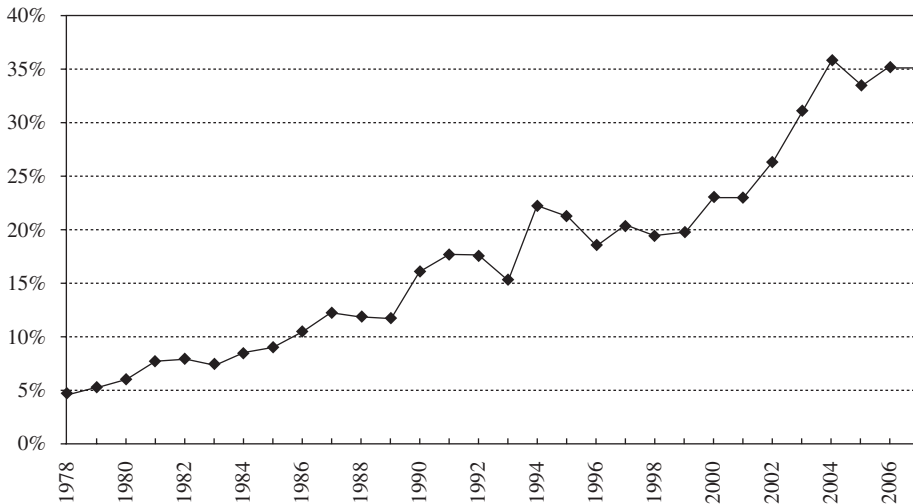


FIGURE 10.1 Share of exports in GDP: 1978–2007

Source: The official website of NBS: <http://www.stats.gov.cn/tjgb/>.

later, when China formally started the export-led growth strategy, the figure reached 47.5 billion dollars. The average growth rate in those 10 years was 17.9%. When China joined the WTO in 2001, its annual exports reached 266.2 billion dollars. Subsequently, China maintained an average annual growth rate of 28.9%, and by 2007, its total exports reached an astounding figure of 1.218 trillion dollars.

Figure 10.1 shows the share of exports in GDP from 1978 to 2007. In 1978, this share was barely 5%, but has reached 35% in recent years. In the meantime, imports reached 27% of the GDP, which means that China's trade dependence ratio—the ratio of total trade volume to GDP—reached 62%, qualifying China as one of the most trade-dependent large countries in the world. It is noteworthy that the fastest growing period was after China joined the WTO in 2001. In the mid-1990s, China's exports/GDP ratio was fluctuating around 20%; the growth accelerated since 2001. This shows that joining the WTO has played a pivotal role in China's integration into the world economy.

10.3 ACCESSION TO THE WTO

China's accession to the WTO took a long period of 15 years. In 1986, China formally applied to the General Agreement on Tariffs and Trade (GATT, the predecessor of WTO) to resume its membership that was given up by the defeated Guomintang government

in 1950. It was not until December 11, 2001 that China was finally accepted as a formal member by the WTO. These 15 years largely consisted of prolonged negotiations, hopes and despair, heated debates in numerous meetings, and skillful diplomacy. China's desire to join the organization was strong and the rationale for that was compelling.

10.3.1 Benefits

China joined the GATT/WTO mainly because this organization was the equivalent of the United Nations in terms of world economics and becoming its member implied recognition by the world community (Wang 1999). It was believed that joining this organization would bring tangible benefits to China. The most important benefit was that China no longer needed to negotiate with individual countries to get the most-favored nation (MFN) treatment. The MFN treatment grants a trading partner the tariff concessions that the importing country grants to a third country. However, this is unilaterally determined by the importing country. Prior to its accession to the WTO, China was constrained to be very passive and had to be content with leaving its own fate in the hands of others. This could not be more evident than in the case of the United States. After 1989, China's MFN status was linked to China's domestic improvements in human rights and was renewed on an annual basis. There were heated debates in the US Congress each year. China had to lobby vigorously to retain its MFN status. It was only on the eve of China's accession to the WTO; that is, in 2000, that the US Congress granted China permanent MFN status. Joining the WTO would provide China an international umbrella under which it would automatically qualify to receive the MFN treatment from any member country. It was thus expected that Chinese exports would increase significantly after its accession to the organization. As Figure 10.1 shows, this was indeed what happened.

It was also believed that joining the WTO would bring opportunities to Chinese firms. Because China had to reduce import tariffs, it would be cheaper for domestic firms to import technologies and equipment from other countries. In addition, it would be easier for Chinese firms to invest outside China (Wang 1999).

In addition to immediate economic gains, joining the WTO was envisioned to serve as a catalyst for domestic reforms (Xue 2007). Li Ruihuan, the former chairman of the National People's Consultation Conference, articulated this point of view when he visited Singapore in November 2001:

Joining the WTO will bring China into the mainstream of the world economy, help enhance the overall quality of the Chinese economy, and raise China's reform, opening, and modernization levels . . . Because we have conducted economic construction in a closed environment for a long time, many aspects of our institutional mechanisms, behavioral modes, and thought models, etc.

have not adjusted [to the world standards]. When the door was closed, the gaps were usually ignored, and deficiencies were usually disguised. After joining the WTO, the Chinese economy will participate in world cooperation and division of labor in broader areas and by deeper degrees, entering the international running track and competing with other countries by the ongoing international rules. Then [our] existing gaps and deficiencies will be fully exposed. Joining the WTO is a good thing for us, but also a challenge. Currently, we are speeding up to deepen reform and push forward theoretical, institutional, and technological innovations to take the challenges brought by our accession to the WTO (Chen and Li 2002, 146).

Innovations were particularly needed in the areas of state-owned enterprise (SOE) reform, raising the efficacy of government administration, and rectifying the legal environment. The WTO regards maintaining the SOEs as a subsidizing tool. To the extent that SOEs are often operating under a soft-budget constraint—they will receive financial support from the government when they are in trouble—the impetus on SOE reform is warranted. In a press conference held in early 1999, Zhu Rongji, the then premier, clearly singled out SOE reform as a condition for China to join in the WTO (ibid.). Therefore, the acceleration of SOE privatization since 1998, despite the opposition from many sections of the society, was at least partly driven by China's desire to join the WTO.

Before a major government reform was carried out at the end of the 1990s, the efficiency of government administration was notoriously low. It was not uncommon for registration of firms to take six months or even longer. A law professor conducted an experiment and found that it took six months and RMB 10,000 to register a company with a capital of RMB 100,000. In order to conform to the WTO rules, government administration had to be streamlined. Indeed, at the end of the 1990s, even before China joined the WTO, a major government reform took place under the leadership of the former premier Zhu Rongji. The reform downsized 15% of the government and streamlined its administration concerning business registration, fee collection, and various aspects of regulation. One-stop registration was adopted by most cities, and a time limit was introduced in many to speed up the government *shenpi* process.

On the legal front, however, changes were much slower. While the specifics of laws and regulations directly conflicting with the WTO rules were changed with outside expert assistance, the broad legal framework only changed gradually. The *Property Law* was only put into effect in 2007 after a long delay; the *Anti-trust Law* only came into effect on August 1, 2008. The weakest part, however, is still the implementation stage of the law. Although some progress has been made, there is still a long way to go.

10.3.2 Challenges

Needless to say, joining the WTO also brought challenges to China. At the time of China's accession, most of the concerns revolved around agriculture, capital-intensive

industries such as automobile and apparatus, and services. For example, by using a computable general equilibrium model, Li, Zhai, and Xu (2000) found that agriculture and the automobile industry would be the two most vulnerable sectors. The automobile industry would be seriously affected because import duties would be reduced from about 80% to 25%. Agricultural duties for within quota imports would not be reduced noticeably but quotas would be phased out in five years, and within and extra-quota tariffs would be unified to 9% (Chen 2004, 75). Land-intensive products such as corn, wheat, and soybeans were considered to be the most affected. In the service sector, telecom, banking, and retailing were the three most worrisome areas because the efficiency of domestic companies was low. However, the last seven years have proved that these worries were overstated.

In the agricultural sector, the initial worries did not consider the positive effect of tariff reduction on China's exports by the other WTO member countries. With low labor costs, Chinese agricultural products became more competitive once they were subjected to lower tariffs. In 2003, China's total grain exports increased by 45.3% and reached 22 million tons; its grain imports decreased by 26.8% to 2.1 million tons (Chen 2004, 83). The competitiveness of most of China's agricultural products, except those that were very land-intensive, increased in international markets. This is clearly shown in Table 10.3 that provides the net export volumes of several major agricultural products between 2000 and 2003. While China's net imports increased quickly in the case of oil seeds and cotton, the trade balances of other products either improved or remained unchanged. The unchanged product was rice. But, the market rate of rice is very low in both China and the world. In the case of vegetables, China's trade surplus increased. This is an expected result because vegetable planting is a labor-intensive activity, which China should shift its emphasis to after deeper integration into the world division of labor under the WTO. The surprising result is that the trade balances of several supposedly land-intensive products, such as wheat, corn, and sugar, also improved. In particular, China changed from a net importer to a net exporter of wheat.

Table 10.3 Net exports of major agricultural products (million dollars)

Year	Wheat	Rice	Corn	Vegetables	Sugar	Oil seeds	Cotton
2000	-14.7	44.8	105.1	117.5	11.0	-254.6	17.0
2001	-7.5	23.0	62.1	126.5	12.5	-278.1	-3.5
2002	-3.3	30.1	116.6	142.9	17.2	-220.9	-2.7
2003	18.8	39.8	176.6	163.4	20.0	-498.0	-108.4

Source: Zhang and Zhou 2007, 135, Tables 6–11.

The growth in the imports of land-intensive products brought some shocks but the initial worries underestimated the room for adjustments. One of the adjustments is the substitution of machinery for labor. Entering the twenty-first century, China's pace of urbanization has accelerated; 140 million rural residents now work outside their own county. Technological progress has also aided this change.

In the automobile industry, we have not witnessed a dramatic increase in the number of imported cars; instead, the last seven years have witnessed not only a large influx of investment by major world automakers but also a drastic rise in domestic automakers. Chery has shown miraculous progress in a short time frame of 11 years. Established in 1997, Chery quickly became the No. 1 domestic automaker in China. In 2007, it sold 381,000 cars, among which 119,800 were exported. It has been the largest car exporter in China for five consecutive years.⁴ Overall, automobile output maintained a fast growth rate in the first two years after China's accession to the WTO. In 2002, China produced 3.25 million vehicles, 38.5% more than in 2001; in 2003, growth was 36.7% over 2002 to reach 4.44 million (S. Zhou 2007, 101). The pessimistic view about the auto industry ignored three factors that led to the expansion of the domestic auto industry.

The first was that domestic auto prices decreased considerably because of reduced tariffs in the initial years after China joined the WTO. For example, from early 2001 to mid-2002, the composite car price decreased by 10%. The prices of economy cars showed larger drops: the price of A0-class cars dropped by 30% (*ibid.*, 104). These large price drops stimulated demand, especially for the lower-end cars. Because cars were, and still are, luxurious goods for most Chinese families, the elasticity of the demand for cars is very high. As a result, the auto industry, as a whole, earned RMB 43.1 billion in profits in 2002—60.9% more than in 2001. It did even better in 2003 and garnered profits amounting to RMB 75.5 billion (*ibid.*, 101).

The second ignored, or unexpected, factor was the high growth rate of income in urban China. Between 2001 and 2007, the per-capita disposable income of urban residents had been maintained at an average annual growth rate of 10.4%, which means that an average urbanite in China would double his 2001 income by 2008. Income growth in large cities has been faster. This is an important force that has sustained the fast growth of China's domestic auto industry.

The last ignored factor was the low land and labor costs in China. Tariff cuts widened the market for economy cars, but it would not be profitable for carmakers to produce economy cars if the product costs were high. The levels of human capital and management skills are low in China and must be compensated for by their low costs in order for carmakers to make a profit. Low land and labor costs in China enabled carmakers to

4. Chery's official website: http://www.chery.cn/qi_rui_gong_si/gsjjs.jsp.

produce cars in a price range as low as RMB 30,000 to RMB 40,000, or about US\$4,200 to US\$5,500.

In the service sector, the shocks have not been as large as initially believed to be. Among the three most worrisome sectors, telecom and banking have not felt much impact. This is primarily because domestic companies have large first-mover advantages in those two sectors. In both the sectors, domestic companies spent large quantities of investment to set up their networks, which preempted the potential entry of foreign companies. In the meantime, domestic companies have improved their efficiency in the last seven years. Domestic telecom companies are offering more flexible services, many of which are even more flexible than those provided in other countries. Bank services have improved through a series of reforms including listing on domestic and international stock markets.

The only sector that has been subject to the shock is the retail sector. International retailers such as Wal-Mart and Carrefour have successfully penetrated and dominated the Chinese retail market using their great advantage of international supply and logistic networks. The upside of the entry of those international retail giants, however, is that they have generated employment and set new standards for domestic retail businesses.

In summary, accession to the WTO was a conscious decision made by China in order to join the international community and integrate into the global economy. To some extent, it was a mini-bang approach as it has required a considerable amount of domestic adjustments, especially in the initial several years. On the balance sheet, however, accession to the WTO has brought more gains than losses to China. In addition to having greatly stimulated China's exports, it has led to reforms in SOEs, government administration, and the legal system. To a certain degree, China's almost "hasty" agreement with the United States in 2001 was partly motivated by the reform leaders' intention to expedite the domestic reform.

10.4 EXPORTS AND DOMESTIC TECHNOLOGICAL UPGRADING⁵

China has maintained an extraordinary growth rate in international trade since its accession to the WTO. However, this growth has been largely sustained by the participation of FDI and processing trade. For instance, China's total export value was US\$968.9 billion in 2006; however, 58% of it came from foreign-invested enterprises, and more than 70% of that 58% was from processing trade (Yang, Yao, and Zhang

5. This section draws from Yang, Yao, and Zhang (2008).

2008). Some analysts insist that China's current progress in foreign trade is a result of increased intra-industry trade that is dominated by multinational corporations, rather than any upgrading of China's own technological and industrial structure. China is still at the very bottom of the global value ladder; it is, at best, a low-level "assembling factory." However, other analysts, who accept the theory of learning by doing, argue that introducing foreign capital and fostering the processing industry is an important way for China to play a role in the new international division of labor, which enables it to use its comparative advantage. This section aims at providing systematic evidence to show that China has caught up with the world technological frontier in upgrading its exports and that the technological capacities of its domestic enterprises have been enhanced through learning by doing.

10.4.1 Technological Upgrading of China's Exports

This subsection uses three measures to provide evidence of the technological upgrading of China's exports: technology-based commodity classification, the revealed comparative advantage (RCA), and the technological content index (TCI). All three measures indicate that China's exports have been significantly upgraded since 1978.

According to Sanjay Lall's classification, we classify the SITC 3-digit commodities into the following four categories: resource-intensive products (PP), labor-intensive products (LT), capital-intensive products (MT), and technology-intensive products (HT). Using this classification, we will study the technological change in China's exports from 1978 to 2006. Figure 10.2 presents the dynamic shares of the four categories of exports. It shows that China's technological development occurred in three periods. The first period was 1978–1985, the very beginning of China's economic reform. During this period, Chinese products lacked competitiveness in the world market. Chinese enterprises had low levels of technology and poor equipment. Thus, exporting resource-intensive products was inevitably the main strategy in this period. The second period was 1986–1993. From the mid-1980s onward, China began focusing on its comparative advantage strategy of abundant labor and vigorously developed its labor-intensive industries. Labor-intensive products began to dominate China's exports. The third period is from 1994 to the present. China's export structure has significantly improved during this period. Thus far, the development of the labor-intensive industry has resulted in initial capital accumulation, including both physical and human capital, which has in turn fostered technological upgrading. To some extent, China has started developing its capital-intensive and technology-intensive industry. Although labor-intensive products remain the main category of exports, their share in the export market has fallen gradually. In contrast, the share of technology-intensive products has grown rapidly.

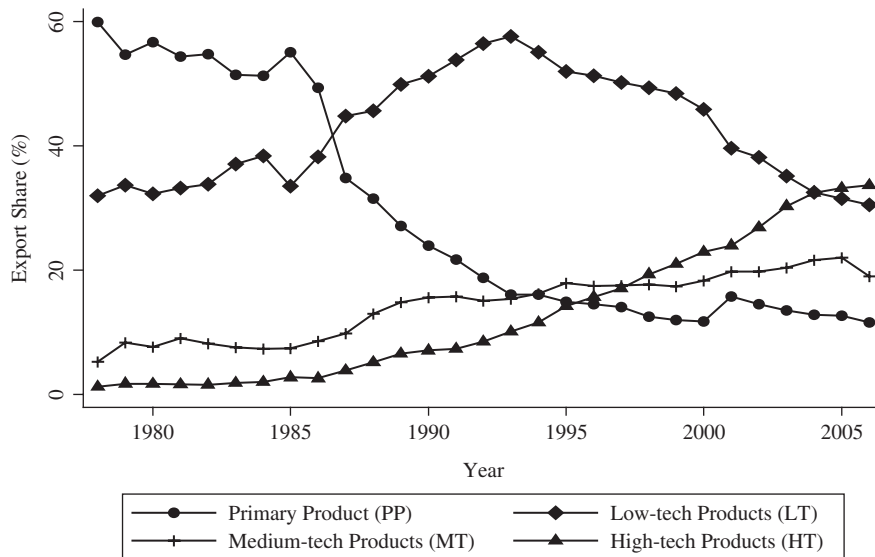


FIGURE 10.2 Value shares of exports by technological level: 1978–2006

Next, we analyze China's export competitiveness using the RCA index. Figure 10.3 shows the RCA of each of the four technological groups of exports. There were also three periods between 1978 and 2006. Before 1985, resource-intensive products accounted for a relatively large share in total exports, and the relevant RCA index was slightly higher than 100. During 1986 to 1993, resource-intensive products were no longer needed as exchange for foreign currencies, and their RCA indexes fell dramatically to about 50. Meanwhile, the competitiveness of labor-intensive products increased significantly. The relevant RCA index continued to rise, reaching a high of 343 in 1993. Labor-intensive products replaced resource-intensive products as the main export products. Meanwhile, the RCA indexes of capital-intensive and technology-intensive products increased moderately, from about 20 to around 50. Since 1994, labor-intensive products have maintained their competitiveness; their RCA indexes have remained above 200. Further, with technology spillover, equipment upgrading, and the development of medium-high technology industries, China's export of technology-intensive products has played an increasingly significant role in the global market. Their RCA index increased rapidly from 64 in 1994 to 170 in 2006.

TCI is an index based on the technological sophistication index (TSI) proposed by Hausmann, Huang, and Rodrik (2005). The construction of the TSI follows the idea

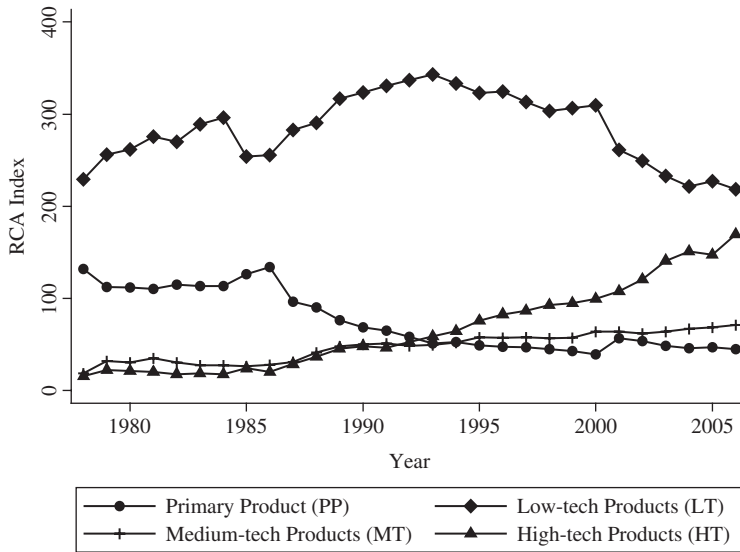


FIGURE 10.3 RCA indexes for PP, LT, MT, and HT products: 1978–2006

of Ricardian comparative advantage; that is, countries with higher per-capita income export products with higher technological content, while countries with lower per-capita income export products with lower technological content. Let us use the subscript j for index countries and l for index products. Then, let Y_j stand for the per-capita GDP of country j , and x_{jl} stand for the export value of product l in country j . The total export value of country j is X_j . Then, the TSI of product l in year t can be defined as

$$TSI_l = \sum_j \frac{x_{jl} / X_j}{\sum_j (x_{jl} / X_j)} Y_j.$$

That is, the TSI is the weighted average of the per-capita income of countries exporting product l , using the modified revealed comparative advantage index as the weight. The technological content index of country j 's exports can then be defined as the weighted average of the TSIs of its exported products:

$$TCI_j = \sum_l \frac{x_{jl}}{X_j} TSI_l.$$

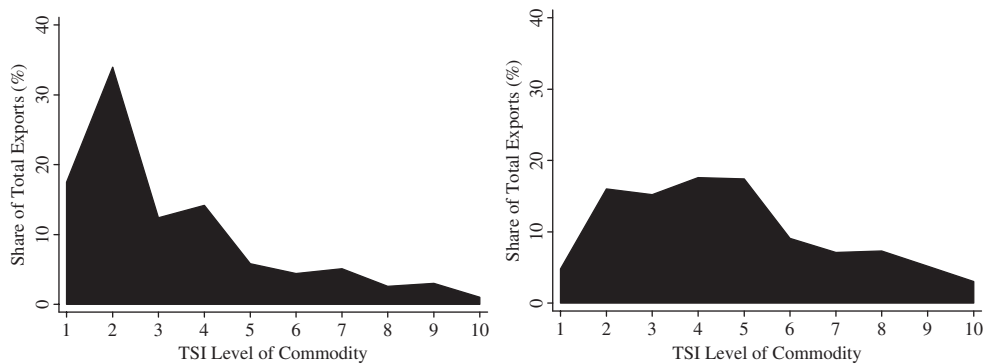


FIGURE 10.4 Distribution of China's exports in terms of TSI: 1985 and 2000

Using this first equation, we calculate the TSI of each of the 5,038 HS 6-digit products for the period 1993–2005, across 112 countries or regions. Calculation details can be found in Yang, Yao, and Zhang (2008). Figure 10.4 shows the distribution of China's exports in terms of TSI in 1985 and 2000. It is clear that China's exports were concentrated in products with low TSIs in 1985 but moved toward the higher end in 2000. This is consistent with the results of our previous studies.

Based on the TSIs of all the 5,038 commodities, we get the overall TCI of China's exports for the period 1993–2005. Figure 10.5 presents the TCI of China's exports as a whole, as well as those of the native and foreign-invested enterprises. We will discuss native and foreign-invested enterprises in the next sub-section and for now, just focus on the overall case of China. As a whole, the technological content of China's exports has grown rapidly, from US\$9,865 in 1993 to US\$17,273 in 2005. China began to give full play to its export-oriented development strategy in the early 1990s; its overall export competitiveness has greatly improved since then.

In summary, great improvements have been made in China's export structure since 1978. The share of resource-intensive products in exports has decreased rapidly; the competitiveness of labor-intensive products has increased dramatically; and significant progress has been made in the export of capital- and technology-intensive products.

10.4.2 Technological Upgrading of Domestic Enterprises

During the first and second periods of China's trade development (that is, 1978–1993), few Chinese researchers and officials questioned China's export-led growth model. During those two periods, advanced technologies and management experiences were introduced gradually with the inflow of capital into China. However, things have

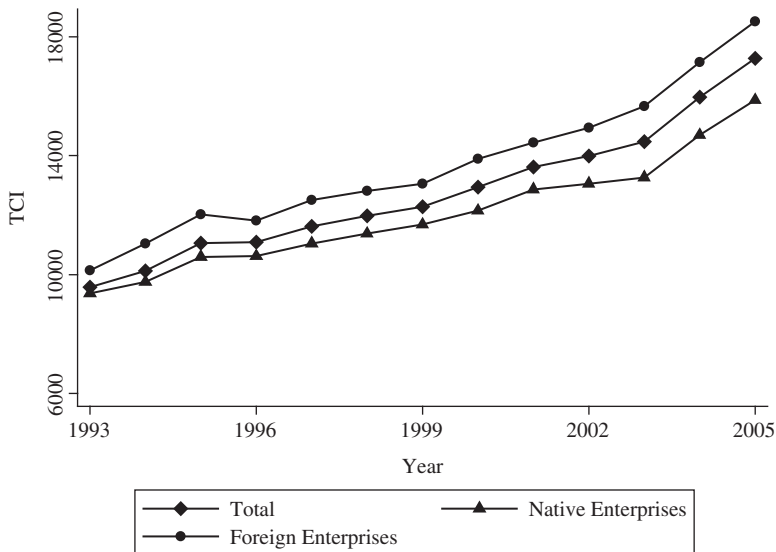


FIGURE 10.5 TCIs of Chinese exports: 1993–2005

changed in recent years. As China's foreign trade has expanded, attention is now being paid to China's domestic technological improvements, rather than simply to the growth of its export values. While the overall technological improvements have been acknowledged, there are two significant concerns. First, FDI firms contribute to more than half of China's exports; hence, there arises a question of whether China's overall improvements are a result of improvements in FDI firms or improvements in native firms. Second, processing trade still plays a dominant role in China's exports. Therefore, there is also the question of whether China's upward move along the technological ladder is a result of improved domestic manufacturing capacities or an artifact created by a rise in the imports of advanced intermediate goods from other countries. The first concern is answered in Figure 10.5, which shows that domestic firms have upgraded their technology as rapidly as the FDI firms although there has been a gap between the levels of technology in these two groups of firms. That is, the overall technological upgrading of Chinese exports has been a result of the simultaneous improvements made by both FDI and domestic firms. Therefore, in the remainder of this subsection, we will focus on the second question.

In a recent study (Yao and Zhang 2008), Ye Zhang and the author use the I-O table to construct an index for domestic technological content (DTC); that is, the technological content of a production process that is carried out by domestic enterprises. Let the

final product sectors be indexed by j , intermediate goods sectors be indexed by i , and the direct consumption coefficient in the I-O table be denoted by α_{ij} , where i is not equal to j . Since the unit value of sector j 's products contains value from the final production procedures used to produce them, the sum of α_{ij} across i is less than 1. We attribute the remaining share to what has been contributed by the final production procedures of sector j 's products. Based on these observations, we define the compound technological content of sector j as:

$$v_j = \sum_i \alpha_{ij} TSI_i + \left(1 - \sum_i \alpha_{ij}\right) TSI_j.$$

Thus, the compound technological content of sector j is a weighted average of the technological content of sector j 's inputs and its final production procedures. An assumption made here is that sector j 's own TSI reflects the technological content of its final production procedures. This assumption makes sense because each product has its own independent TSI; that is, its TSI is not compounded from the TSI of its inputs.

Let β_i denote the import share of sector i . Then, the domestic technological content of sector j equals

$$v_j^D = \sum_i \alpha_{ij} (1 - \beta_i) TSI_i + \left(1 - \sum_i \alpha_{ij}\right) TSI_j.$$

This equation measures the technological content of sector j during its domestic production, excluding the technological content embedded in the intermediate inputs imported from abroad. Then, the DTC index is naturally defined by

$$DTC_j = \frac{v_j^D}{v_j}.$$

We first calculate v , v^D , and DTC for each sector. Then, based on the v 's, v^D 's, and DTCs of the sectors that export products, we get the weighted average of the v , v^D , and DTC, respectively, for a given country or region, where the weights are simply the sectoral shares in the country/region's total exports. Value v represents the total technological content of a country/region's exports; v^D represents the domestic technological content of a country/region's exports; and domestic technological content index, DTC, is an indicator that determines a country/region's position in the international division of labor.

We first calculate the sectoral DTCs for China as a whole and then for Jiangsu Province individually using the 124 sector I-O tables of 1997 and 2002. We begin with the TSIs of the SITC four-digit products and aggregate them to the 124 sectors to obtain

Table 10.4 DTCs of exports from China and Jiangsu Province: 1997 and 2000

		1997	2002	Difference
China	v	12,214	11,595	-619.1
	v^D	10,977	9,394	-1,583.5
	DTC	0.91	0.83	-0.08
Jiangsu Province	v	12,513	11,774	-739.4
	v^D	11,461	8,878	-2,582.2
	DTC	0.92	0.78	-0.14

their TSIs according to the product directories accompanying the I-O tables. Weights are product shares in a sector's total exports. We can then calculate each sector's DTC. On the basis of the DTCs thus obtained, we can determine the national (provincial) DTC, where the weights are simply the value shares of sectors' exports in the national (provincial) total. The results are presented in Table 10.4.

Results shown in Table 10.4 are interesting in several aspects. First, both the v values of China as a whole and Jiangsu Province barely changed between 1997 and 2002. To be precise, they fell by 5% and 6%, respectively. Since the TSIs are measured as world averages, this implies that the total technological content of China's exports has slightly lagged behind the rate of the growth of world exports. However, this result does not conflict with the conclusion that the technological content in absolute terms has increased. Rather, it implies that relative to the world average, Chinese exports have indeed showed some sign of moving toward lower-end products. However, the second aspect of Table 10.4 is even less encouraging—the domestic technological content of China and Jiangsu Province fell dramatically from 1997 to 2002. In 1997, the v^D of China was US\$10,977 and that of Jiangsu Province was US\$11,461; in 2002, however, they decreased to US\$9,394 and US\$8,878, a reduction of 14% and 23%, respectively. The third concern revealed in Table 10.4 is regarding the DTCs of China and Jiangsu Provinces. In 1997, the DTCs of China and Jiangsu Province were at approximately the same level, with more than 90% of the technological content of their exports being created by domestic production. However, from 1997 to 2002, China's level declined from 91% to 83%, a decrease of 8 percentage points, while Jiangsu's level declined from 92% to 78%, an even larger decrease of 14 percentage points. These results seem to confirm the widespread concern that China is losing out on domestic manufacturing capacities due to the growth in processing trade.

However, this view is challenged when we look at the case of Guangdong Province, for which we have data pertaining to a long period. As one of the earliest economically opened up provinces, Guangdong has been playing an important role in China's

export-oriented economy. Its export share in the country's total exports has been 30%–50% over the last two decades. We have I-O tables of Guangdong Province for three separate years—1992, 1997, and 2002; however, for 1992, we have data on only 32 instead of 124 sectors. In order to make comparisons, we will calculate two sets of results: one using 124 sectors for 1997 and 2002, and the other using the 32 sectors in the 1992 I-O table for 1992, 1997, and 2002. The 32 sectors in the 1992 I-O table are broader than the 124 sectors in the 1997 and 2002 I-O tables. We aggregate the 124 sectors to the level of the 32 sectors using the value shares of exports as weights. Figure 10.6 documents Guangdong's DTCs under these two sets of results.

Figure 10.6 reveals some surprising findings. Unlike China and Jiangsu Province, Guangdong's DTC increased substantially from 1997 to 2002. When calculated using 124 sectors, Guangdong has a DTC value of only 0.21 for 1997, which increases to 0.61 for 2002, rising by 40 percentage points. When calculated using 32 sectors, DTC values for 1997 and 2002 were 0.46 and 0.71, respectively, showing an increase of 25 percentage points over the five-year period. Although there are discrepancies between the two sets of results, the upward trends are similar. Considering the fact that Guangdong's processing trade has been growing and is still leading the nation, the view that integration into the global value chain will reduce a country/region's DTC cannot be justified.

Another important finding in Figure 10.6 is that for the 1992–1997 period, Guangdong's DTC (32 sectors) decreased from 0.89 to 0.46. This decrease and the growth from 1997 to 2002 form a V curve, suggesting that Guangdong's participation in the global value chain and the expansion of its processing trade have resulted in two stages of DTC movement, first declining and then rising. We call this phenomenon the “V-reversal.” Nevertheless, Guangdong's DTC for 2002 was still lower

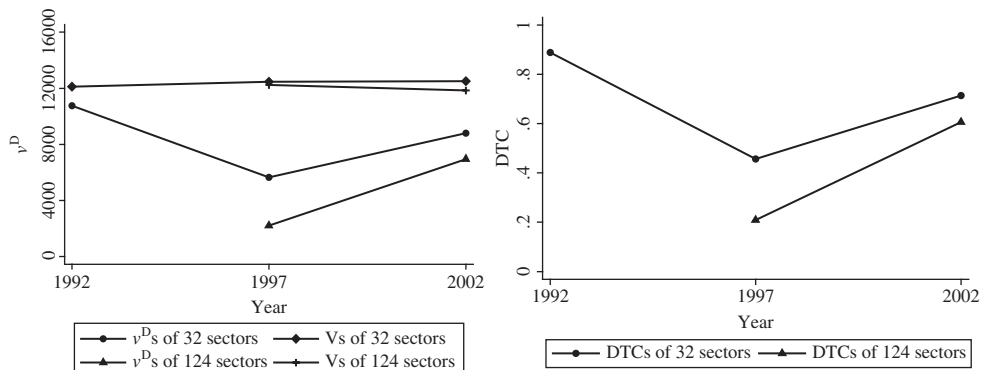


FIGURE 10.6 Changes in v , v^D , and DTC of Guangdong's exports: 1992–2002

than that for 1992; its rising course was slower than its declining course. Moreover, Guangdong's DTCs for 1997 and 2002 were still below the national and Jiangsu levels for each period.

In summary, this section finds that China's export-led growth model has not resulted in the stagnation of China's upgradation process in its exports. China has at least caught up with the average speed of world technological upgradation. Yet, processing trade has indeed increased China's dependency on imported technologies. Nevertheless, the case of Guangdong's V-reversal indicates that the decline in domestic technological content may be temporary. As long as Chinese firms continue to learn from imported inputs, more domestic inputs will substitute the imported inputs. In the long run, China will gain from international trade.

10.5 OPENING UP AND REGIONAL DISPARITIES⁶

Regional disparities have both economic and political consequences. Economically, large regional disparities may hinder the development of inland provinces; politically, they put pressures on the central government to give more concessions to inland provinces. Figure 10.7 provides two measures of income inequality, the general entropy

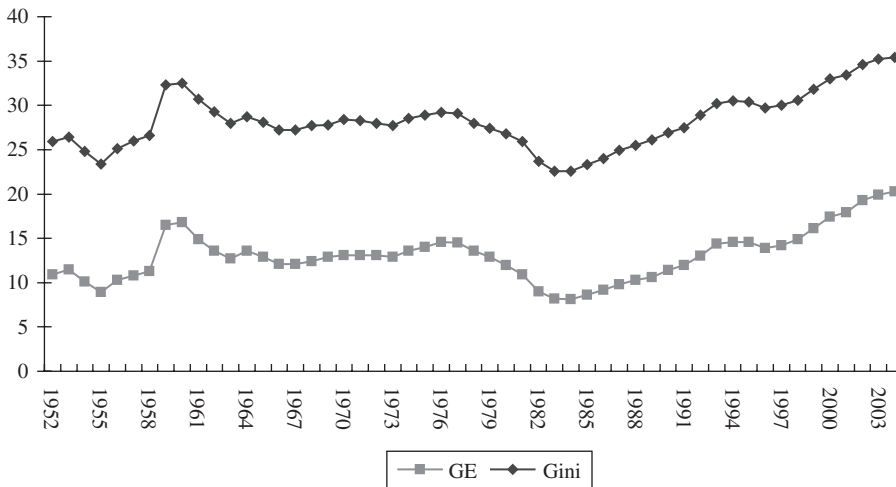


FIGURE 10.7 Inter-provincial income inequality in China: 1952–2004

Source: Gajwani, Kanbur, and Zhang 2006, 13, Table 1.

6. This section draws from Yao (2008a).

(GE) index and the Gini coefficient, among Chinese provinces between 1952 and 2004. Larger values of these two indexes imply more unequal income distribution. It is clear that regional inequality was quite stable before the early 1980s except in the period of the Great Famine. Since 1983, however, regional inequality has increased steadily except during a short period of three years in the mid-1990s.

The question of interest here is whether the increasing inequality is a result of opening up. The coastal region was the first to open up to the outside world and has enjoyed preferential policies handed over by the central government. However, as reviewed in Section 10.2, there was strong economic rationale to begin opening up with the coastal region, primarily because of its geographic advantages. Therefore, a careful study is needed to disentangle the effects of preferential policies from those of geography. It is noteworthy, however, that preferential policies have been gradually extended to inland provinces through various opening-up programs. We need to take these programs into account when we compare the effects of preferential policies and geography. Next, we provide a concise description of the opening-up programs.

We first note that apart from the SEZs, the coast also has coastal open cities (COCs), coastal economic open zones (CEOZs), and customs-free zones (CFZs). In the 1990s, economic opening up spread to other regions through new open economic zones. These included Major Cities (MC) along the Yangtze River, Border Economic Cooperation Zones (BECZs), Capital Cities of inland provinces and autonomous regions (CCs), economic and technological development zones (ETDZs) outside the COCs, and Bonded Areas (BA) (Démurger et al. 2002). By the mid-1990s, opening up finally spread to almost every corner of the country, culminating in a “zone fever” that led to the establishment of numerous ETDZs and hi-tech zones throughout the country. However, the number of ETDZs approved by the central government was limited. Even by the end of the 1990s, the distribution of the special zones was still tilted toward the coastal region (*ibid.*).

All the abovementioned special zones carried substantial preferential policy treatments. Table 10.5 provides their summary. These policies involved three types of preferential treatments—tax breaks, more freedom to approve the FDI, and a larger retention rate of foreign exchange earnings. They provided substantial benefits to firms operating in the zones.

Démurger et al. (2002) provide a comprehensive study on the factors determining China’s uneven economic development for the period 1978–1998. In particular, they examined the relative importance of government preferential policies and geography in determining growth variations across provinces. For this purpose, they constructed two variables, one measuring policy preferences and the other, geographical advantages. For the first, they created the preferential policy index, called *Policy*, based

Table 10.5 Preferential policies offered to different zones

	SEZs	COCs	ETDZs	CEOZs	CFZs
National income tax ^a	15%, exempted for the first 3 years	24%	15%	24%	—
Local income tax	Reduced or exempted	Reduced or exempted	Reduced or exempted	Reduced or exempted	—
ICT on exports ^b	Exempted	Exempted	Exempted	Exempted	Exempted
ICT and custom duties on imports					Exempted
ICT and custom duties on FDI's imported equipment	Exempted	Exempted	Exempted	Exempted	Exempted
Right to approve FDI	Much greater	Greater	Much greater	Greater	Much greater
Right to retain foreign exchange earnings ^c	100%	50%			

Source: Wang and Hu (1999), 180–181, Table 7.2.

^aStandard rates were 30% for joint ventures and 20%–40% for foreign-owned companies.

^bICT stands for industrial and commercial tax. It was replaced by value-added tax after the 1994 tax reform.

^cThe standard ratio was 25%.

on the number of designated open zones in a province and the extent of preferential treatments they received. They assigned different weights to different zones according to the following rule:

Weight = 3: SEZ or Shanghai Pudong New Area

Weight = 2: ETDZ or BECZ

Weight = 1: COC, COEZ, OCB, MC, BA, or CC

Weight = 0: No open zone

If a province (such as Guangdong) had one or more SEZs, it gets a score of 3 for its preferential policy index. That is, the value of the variable *Policy* does not increase when a province has more than one zone.

As a proxy for geography, Démurger and coauthors created a variable, *Pop100cr*, measuring the ease of access to the sea for a particular province. To be precise, it is “the proportion of the population distribution of a province in 1994 within 100 km of the coastline or ocean-navigable river[s], excluding the coastline above the winter extent of sea ice and the rivers that flow to this coastline” (Démurger et al. 2002, 21). The correlation coefficient between *Pop100cr* and the average value of *Policy* in 1978–1998 is 0.54.

Table 10.6 Policy versus geography: regression results

Period	Initial GDP	<i>Pop100cr</i>	<i>Policy</i>	R ²
1979–84	–1.23 (1.47)	1.51 (2.31)	0.56 (2.88)	0.28
1985–91	–0.34 (0.29)	–0.64 (0.73)	1.19 (2.67)	0.38
1992–98	–0.60 (0.57)	4.27 (7.14)	0.99 (1.35)	0.71
1999–06	0.52 (0.78)	0.51 (0.66)	–0.58 (1.10)	0.06

Note: The dependent variable is the average growth rate of per-capita GDP (%) in each period. Regressions for 1979–1998 are based on data for 30 provinces (Chongqing has been excluded); regression for 1999–2006 is based on data for all 31 provinces. Initial GDP is the logarithm of the per-capita GDP for the year immediately preceding each period. *Policy* takes the average values of each period in the three regressions for 1979–1998, and takes the 1998 values in the regression for 1999–2006. A constant is added in each regression. Numbers in parentheses are t-statistics for the estimates. The results for the three periods between 1979 and 1998 are from Table 12 of Démurger et al. (2002); the results for 1999–2006 are calculated by the author based on data from *China Statistical Yearbook, 2000–2006*; *China Statistical Abstracts, 2007* (NSB 2007).

Therefore, the two variables have enough variations to allow us to disentangle the effects of geography and policy.

Using *Pop100cr* and the average scores of *Policy* for different periods and controlling the initial per-capita GDP, Démurger and coauthors estimated separate growth equations for three periods: 1979–1984, 1985–1991, and 1992–1998. The results are presented in the first three rows of Table 10.6. The last row of the table presents new results for the period 1999–2006 calculated by the author. The *Pop100cr* variable is the same as in the first three regressions; *Policy* uses its values in 1998. Several relevant results emerge from the table.

First, the coefficient for initial GDP is not statistically significant in any of the four periods, so there is no evidence for convergence of growth rate among Chinese provinces.⁷ Second, the role played by government policy has experienced a hump throughout the years. In the period 1985–1991, the coefficient of *Policy* increased significantly over the period 1979–1984. However, it became insignificant in the later two periods: 1992–1998 and 1999–2006. That is, preferential government policies were important in the 1980s, but not since the 1990s. Third, the geography variable *Pop100cr* is statistically significant in the two expansionary periods of 1979–1984 and 1992–1998 but not in the less expansionary periods of 1985–1991 and 1999–2006.⁸ It appears that the

7. In the growth literature, convergence is a frequent topic. Due to diminishing marginal returns, a country with a higher level of income should grow slower than that with a lower level of income given that they have the same steady-state growth rate. In a growth regression, this means that the sign of the initial GDP should be negative, in which case we say that we have found convergence among the countries (regions). If the sign is positive, then there is divergence; if the coefficient is insignificant, then there is neither convergence nor divergence.

8. The period 1985–1991 included the year 1989 and the slowdown years that followed; the period 1999–2006 included years of major deflation.

coastal region has been more volatile than the inland regions: In expansionary periods, it moved ahead of the other two regions; in recessive periods, it contracted more than the other two regions. Fourth, the predictive power of the growth regression declines significantly for the period 1999–2006, with its R^2 decreasing to only 0.06. Neither geography nor government policy played a significant role in this period.

In summary, we have the following two major conclusions. First, geography played a diverging role in periods when the economy was on an expansionary track. This is evidence for the coastal region's deeper integration into the world economy. Second, preferential government policies played a significantly diverging role in the 1980s but have since lost their strength. This has been partly caused by the dispersion of preferential government policies to inland provinces in the 1990s. In 1991, the year before Deng Xiaoping's south tour, the average score of *Policy* for the coastal region was 2.18, but the average score for the other two regions was 0.10. By 1998, however, the score witnessed a marginal increase for the coastal region attaining a value of 2.36, but a substantial increase for the other two regions attaining a value of 1.50.

Opening up has enabled the coast to integrate quicker into the global economy than into the interior and thus has an enlarging effect on regional income disparities. However, it is not a good idea to reverse the trend of opening up or to demand more preferential policies for the interior because this would not help the interior in catching up with the coast. Alternative policies should be considered to reduce regional disparities. This could include a more flexible migration policy to encourage migrants from interior provinces to settle down in the coastal region, more formula-based fiscal transfers, and more targeted investments in the interior (Yao 2008a).

10.6 CONCLUDING REMARKS

Opening up has been an inseparable part of China's reform process. In this chapter, we have established the following links between opening up and institutional innovation. First, opening up, especially in the case of the SEZs, has been used as an experimental tool to attempt introducing institutional elements that are not a part of traditional socialism. The success of Shenzhen helped the reformist leaders to identify the direction of reform, which is to establish a market economy. Second, opening up has also been used as a catalyst for more domestic reforms. By the end of the 1990s, the remaining areas without serious reforms, SOEs, government administration, and the legal system, needed outside pressures to start reforms. Joining the WTO brought such pressures. Third, the opening-up process comprised a series of mini-bangs, each of which brought sufficient shocks to the economy. The accumulative effects of those shocks are substantial. Today, China is one of the most open economies in the world in terms of

international trade and direct investment. The Chinese economy and even society have changed substantially due to China's opening up.

Opening up also has negative impacts, especially in the short run. However, some of these negative impacts, such as the decline in the exports of domestic technological content, will disappear as China draws lessons from opening up. Other negative impacts, such as increased regional disparities, should be mitigated by alternative policies encouraging the movement of labor to the coast. It is true that China's exports are still at the lower end of the technological ladder, but this does not qualify the argument that China is being exploited by international capital. Great Britain used to be the "world factory" in the nineteenth century. However, neither the Chinese nor the British think that people in Great Britain were exploited by the world. On the contrary, often in the past, we believed that Great Britain used its "world factory" status to exploit the world by selling cheap goods—just like many people in the developed countries now believe is being done by China. In today's world, economic opening up is not only a fact that we have to accept but also the right road for China in order to sustain continuous economic growth. China benefits from the current world order in which freer trade is one of the important components. China should be a defender, not an opponent, of free trade.

CHAPTER 11

Financial Reform

The financial sector has been one of the slowest sectors in terms of undergoing reform. Despite some major reforms, this sector is still miles away from its desirable state. While private firms contribute to 80% of the industry's GDP, the banking sector is still primarily dominated by the four large state-owned banks. There are a handful of smaller regional banks and many urban and rural credit co-operatives, but their shares are small as compared to those of the four largest banks. In addition, interest rates are still controlled, making China a classical example of financial repression. While the capitalization of the Shanghai and Shenzhen Stock Exchanges is huge, there are only 1,200 listed firms. Regional capital markets are virtually absent. Consequently, there is a flow of financial resources from less developed to more developed regions that is exacerbating the already large regional income disparities. Last, but not the least, capital control is still vigorously pursued and a fixed exchange rate regime (ERR) is maintained, which according to many, contributes to China's mounting foreign exchange reserve that has put tremendous pressures on China's domestic price levels since 2003.

Many scholars believe that a well-functioning financial market is one of the main contributors to economic growth. It seems that China has defied the mainstream once again as it has maintained an extraordinary growth record despite its rather underdeveloped and to a large extent, repressed financial sector. Chinese firms have probably unearthed ways to circumvent crippling regulations and raise money through informal channels.

It is a daunting task to present an in-depth review of reforms and problems in the financial sector. This chapter will first provide a succinct review of the issues inherited from the planned-economy period and the major reforms conducted during the reform period. We will then focus on how China has managed to achieve high rates of economic growth despite a crippled financial system. This is the area where quasi-market transactions and informal arrangements step in to fill the gap created

by rigid government regulations. Thus, it has general implications for other countries undergoing deregulations. Finally, we will use the evolution of the exchange rate regime as an example to illustrate China's gradualist approach to financial reform. The key message is that Chinese gradualism is one of conscious design that illustrates the essence of volitional pragmatism.

11.1 THE LEGACY OF THE PLANNED ECONOMY

In the planned-economy period, the financial sector played a very limited role. Financial activities, like other tertiary activities, were not regarded as being productive. Instead, they were meant to be supplements to productive activities, which were controlled by state plans. Banks functioned as state accountants rather than credit-creating institutions. The People's Bank of China (PBOC) was virtually the only financial institution during the planned period. It had numerous subsidiaries throughout the country whose functions ranged from those of a central bank to those of a commercial bank, although it did not fit into either category in totality. For example, there was virtually no need for monetary policies because the amount of money needed was predetermined by state plans. The amount of loans issued to firms was also predetermined by the production quota each firm received from the state plan. There were attempts to set up separate commercial banks; however, in the end, they either became subsidiaries of the PBOC or remained accountants for specific purposes. For example, the Agricultural Bank of China (ABC) was established twice in 1955 and 1963 but was annexed into the PBOC in 1965. Bank of China (BOC) maintained nominal independence, but it was virtually the PBOC's subsidiary for international dealings. China Construction Bank (CCB) was established in 1954. Its purpose was to manage the funds allocated for infrastructure development. Except for a short period of time from 1970 to 1972 when it was a subsidiary of the PBOC, the CCB was part of the Ministry of Finance. There were many rural credit cooperatives, but they were also subsidiaries of the PBOC. In short, the financial sector was dwarfed by economic planning and all financial activities were controlled by the PBOC (Zhao and Guo 1998).

In addition to a highly centralized system, financial repression was evident in the planned period. Interest rates were kept at very low levels with infrequent adjustments. Between 1954 and 1978, the monthly rate for loans to SOEs was maintained between 0.42% and 0.6% (Lin, Cai, and Li 1996). This occurred despite the fact that the Chinese economy experienced dramatic fluctuations including overheating during the Great Leap Forward and serious contractions in the ensuing period of famine. In fact, it was in 1960, at the height of the famine, that the interest rate reached a

peak of 0.6%. That is, the interest rate policy was not designed to mitigate economic fluctuations; in this case, it prevented the economy from escaping from contractions. On the other hand, the renminbi was highly overvalued. Between 1950 and 1971, the renminbi was revalued by 41.4% against the US dollar; between 1971 and 1978, it was revalued again by 30.1% to reach 1.72 renminbi to 1 dollar (*ibid.*). These revaluations had nothing to do with improved balance of payment as the volume of Chinese exports lingered at low levels.

Low interest rates and high values of the renminbi were maintained to help China's heavy-industry development strategy. Low interest rates suppressed interest payments to savings and lowered the costs of capital formation in the industry. Thus, they were a means for the government to transfer cheap financial resources from ordinary people to certain industries. On the other hand, overvalued renminbi was intended to help import substitution. One of the major objectives of the heavy-industry development strategy was to build China's own industrial manufacturing capacities so China would not require to import key machineries from abroad. This was believed to be a critical factor for China becoming an independent and self-determining nation.

Many scholars (e.g., Lin, Cai, and Li 1996) believe that the heavy-industry development strategy did not recognize China's comparative advantage in labor-intensive industries and was thus a wrong choice. However, the merits and shortcomings of this strategy should be weighed against two sets of considerations. The first set is concerned with the international environment in the early 1950s and China's aspiration to become an independent and self-determining nation (Huang, Yao, and Han 2006). The lessons that the early Chinese leaders—Sun Yat-sen, Chang Kai-shek, and Mao Zedong—learned from China's humiliating history since the Opium War were centered around the idea that remaining backward was an invitation to be bullied by others. Upon consolidating power, the first and foremost task that the Chinese Communist Party (CCP) spearheaded was to build China's own manufacturing bases, particularly the critical capability of manufacturing military weapons including the nuclear bomb. Even today, long after the fall of the iron curtain, nations (such as India and Pakistan) take refuge in the possession of a nuclear arsenal, which is a critical factor, to gain international prominence. China's choice of developing its heavy industry in the 1950s can be justified on the basis of building a self-determining nation. The second set of considerations is concerned with the externalities associated with heavy industry. These externalities exist because heavy industries provide intermediate inputs for consumer goods that benefit from roundabout production; that is, a finer division of inputs improves their efficiency of production. Under this circumstance, private investment in heavy

industries tends to be insufficient because private investors cannot obtain all the benefits brought about by their investment. Therefore, proper government interventions such as direct involvement in or subsidies to heavy industries can be justified. Keeping this idea in mind, Yao and Zheng (2008) conduct a quantitative analysis of China's heavy-industry development strategy based on a dynamic general equilibrium model. By using actual data to calibrate our model, we want to determine the actual rate of subsidies to the heavy industry in the past in China and the optimal rate and duration of subsidies. Here, the rate of subsidies corresponds to the rate of the shortfall of the actual interest rate from the market interest rate. The optimal rate and duration of subsidies are defined such that the discounted sum of consumer welfare is maximized. We find that the actual rate of subsidies in China is 36%, and the optimal rate is 32%. That is, the actual rate is higher than the optimal rate, but the gap is not large. However, the optimal duration of subsidies should be 12 years; albeit, the actual duration was 25 years (1953–1978).¹ We also find that with the optimal rate and duration of subsidies, the discounted sum of consumer welfare is higher than the level reached without government interventions after 1978. That is, optimal government subsidies to heavy industry improve people's long-term welfare. Our conclusion is that China's heavy-industry development strategy during the planned economy did not deviate much from the optimal levels of government intervention but lasted too long.

To a large extent, China's financial arrangements served the heavy-industry development strategy well. Under the planned economy, production plans were the central pillar, and the role of fiscal and financial arrangements was to ensure that these plans were carried out smoothly. Consequently, there was virtually no need for monetary policies. Money supply was directly determined by production plans. Bank loans and cash supply were issued to merely cover the demand for money arising from material procurements and wage payments in the production process. When money supply was larger than what was required in the production process, the economy did not expand because of the constraints of the plan. Similarly, the economy did not contract when money supply was insufficient to cover transactions in the production process because the firms had to continue to produce in order to fulfill the plan. As a result, money supply was not a macroeconomic tool that a central bank would use to intervene with the economy (Hu and Sun 2004). This was certainly consistent with the priority of production plans and the simplicity of the planned economic system.

1. However, the actual duration should be considerably shorter if one subtracts the years of the Great Leap Forward, the ensuing famine, and the Cultural Revolution.

11.2 MAJOR REFORMS AND DEVELOPMENT SINCE THE EARLY 1980S

The reforms carried out in agriculture and other sectors in the early 1980s called for the reform of the financial sector. It is noteworthy that there have been substantial reforms in that sector since the early 1980s although today it remains one of the few sectors that have not reached desirable levels of reform. This section provides a succinct overview of those reforms.

Establishment of the central bank. In September 1983, the State Council designated the PBOC as the central bank and began to transfer the PBOC's commercial functions to the existing and newly established commercial banks. This was a major step in China's transition to a market economy. It broke the PBOC's monopoly in the financial sector and made room for commercial banks to act solely on the basis of commercial objectives. It also established the PBOC's independent role in managing China's monetary policy and overseeing the functioning of the financial sector. Moreover, it began a new period in which the government began to use indirect methods to intervene in the economy. Economic reforms in agriculture and industry had given economic actors considerable room for autonomous decisions; production plans were not as rigid as in the planned-economy period. As a result, direct planning of loan and cash supply no longer worked. The establishment of the central bank was clearly linked with the reforms in other sectors, which manifests the idea of institutional reinforcement that we proposed in Chapter 6.

The PBOC had three major functions when it was designated as the central bank. The first, like in the case of any other central bank, was to manage the country's monetary policy. The PBOC obtained an independent role in the monetary policy in the mid-1980s when the decision was arrived at after deliberation, wherein the central bank was to be independent of fiscal plans, production plans, and local governments (Hu and Sun 2004). The second function of the PBOC was to oversee the functions of other financial institutions. This function was transferred to the China Banking Regulatory Commission (CBRC) in 2003. The third function of the PBOC was unique to China. It was to provide financial services for the government and other financial institutions mainly including transaction clearance, issuing debts and bonds for the Ministry of Finance, and managing foreign reserves.

Rebuilding commercial banks. The three original commercial banks—ABC, CCB, and BOC—gained independence from the PBOC in 1979. However, during the first several years, these banks did not operate solely on a commercial basis; they remained the government's policy instruments to reach certain goals. For example, they were still

responsible for allocating government funds dictated by the plans. In addition, their operations were confined to specific areas of business. The ABC was designated for operating in rural areas; the CCB was responsible for issuing loans to infrastructural projects; and the BOC specialized in managing businesses related to foreign currencies. In 1983, the Industrial and Commercial Bank of China (ICBC) was established and designated to take over the PBOC's functions of dealing with ordinary savings and loans. It soon became the largest commercial bank in China although it was established at the very end. These four fully state-owned banks have dominated China's banking sector since then. In the early 1990s, they gained full commercial status after three policy banks were established to carry out policy goals. From 2004 onward, the CCB, BOC, and ICBC were listed on the stock markets, thereby ending their status of fully state-owned banks.

In addition to the four big banks, a dozen shareholding and regional banks were established in the 1990s. Bank of Communications, the CITIC Bank, Guangda Bank, Huaxia Bank, and Mingsheng Bank are examples of shareholding banks. Among these, Mingsheng Bank is a private bank as its shareholders are private companies. The Shenzhen Development Bank and Pudong Development Bank are two examples of regional banks. In recent years, the number of commercial banks has increased considerably with the transformation of urban credit cooperatives into regional commercial banks. All these banks are shareholding banks with substantial amounts of private shares. The reform of the rural credit cooperatives has been much slower. They gained independence from the ABC in 1996, but no further reforms have been seriously undertaken although there have been discussions about turning them into commercial banks.

Establishing policy banks. In 1994, three policy banks—the State Development Bank, The Export-Import Bank of China, and the Agricultural Development Bank of China—were established to take over the policy functions of the four big banks. This was a critical step to transform those four banks from government policy tools to truly commercial entities. The three policy banks obtain their capital from the central government; operational funds, from government budget; and bonds and loans, from the central bank. They do not pursue profits but instead aim at providing funds to key projects with government priorities.

Non-banking financial institutions. In addition to banks, the development of non-banking financial institutions also gained momentum in the 1990s. Insurance was resumed in 1980. In the meantime, many trust companies were established. The opening up of the Shenzhen and Shanghai stock markets led to the flourishing of stock companies. In 2001, open funds were allowed.

Opening up to foreign banks. Before 1982, no foreign banks were allowed to operate in China. Foreign banks could only set up representative offices. In 1982, the first foreign bank was allowed to deal in foreign currencies. In 1985, foreign banks were

allowed to set up subsidiaries in the special economic zones (SEZs). Later, this policy was extended to other cities three times—in 1990, 1992, and 1994. In 1996, eight foreign banks were allowed to deal with renminbi businesses in Pudong. China's accession to the WTO started a new era of its opening up to the foreign financial services. After the five-year grace period, foreign banks were allowed to deal with renminbi businesses outside Pudong in 2006.

The capital market. Scattered regional stock markets existed even before the national stock markets were established. The first stock was issued by Shanghai Feile Audio in 1984. The company formally offered its shares for public trading in Jing'an Stock Counter in 1986. The opening up of the Shanghai and Shenzhen Stock Exchanges in 1990 started a new era of China's capital market. After 40 years, the Chinese people began to own stocks again. By June 2007, there were 1,477 companies listed in the two markets. Most of the listed companies were state-owned during the initial stage of the two stocks. Half of these companies' shares were non-circular. The stock market was thus very thin. In 2001, a reform was initiated to make the non-circular shares tradable. Although there have been setbacks, the reform continued and reached a conclusion by September 2006 when Sinopec completed its reform.

In addition to the two national stock markets, regional markets offering over-the-counter trading appeared in the mid-1990s. However, many of these markets encountered problems of irregularities and even fraudulent conduct and were subsequently shut down by the central government. There were also many credit associations that mushroomed in the countryside. They were very active in providing loans to farmers and small businesses. But again, there were problems of irregularities, frauds, and even usuries. Together with the regional stock exchanges, they were shut down by the central government at the end of the 1990s. In the fall of 2006, however, the CBRC announced a plan to experiment with small township banks in the central and western regions. This opened a window for a more complete banking system in China. The current obstacle is the lack of a regulatory framework. Indeed, the problems with the regional stock markets and rural credit associations existed mostly because of the lack of regulation. The government pretended that they were just like other informal financial markets that would come and go spontaneously and did not take any measures to regulate them. It stepped in only after serious problems began to emerge.

In the cities, it is the property-rights exchange centers that provide capital finance to local companies. These centers were established in the process of SOE privatization. Their initial role was to list SOE assets for outside purchases through open biddings or private negotiations. After SOE privatization concluded, their role shifted to that of intermediaries for private offerings. They differed from the stock market in that they cannot offer individual shares to outside buyers.

11.3 PROBLEMS THAT PERSIST

Despite the reforms, some of which were audacious, the financial sector has remained one of the few sectors that have retained significant traits of the planned economy. Consequently, it is also one of the least efficient sectors in China. This section lays out several major problems that have broad efficiency implications.

Dominance and inefficiency of the four large banks. It is well known that the Chinese banking system is overwhelmingly dominated by the four large banks—CIBC, BOC, CCB, and ABC. In the early 1990s, credits issued by these four banks comprised more than 90% of the total amount of formal bank credit in the country. According to the PBOC, this ratio was maintained at 77% until 2000 (PBOC 2000). Even by 2005, it was 60%. These banks suffer from serious problems caused by huge non-performing loans and inefficient operation. The whole banking system was virtually bankrupt by the end of the 1990s as its net worth had become negative (Lardy 1998, 109–111). The amount of non-performing loans reached RMB 2.5 trillion at the end of the 1990s. In recent years, the performance of the banking sector has improved due to governance changes through public listing. In addition, several asset management companies have been established to acquire the bad loans of the four largest banks. However, as of the fourth quarter of 2008, the amount of outstanding non-performing loans of the whole sector was still RMB 1.27 trillion, or 6.17% of the total amount of outstanding loans in the sector.² Most, 1.11 trillion, of these non-performing loans were in state-owned banks.

Larger banks tend to operate in large urban centers and prefer to deal with large companies because doing so is cost-effective for them. The dominance of the four large banks is indicative of an inadequate banking structure in China, the main deficiency being the lack of regional and smaller banks, particularly in areas where agriculture is still the primary source of income.

Financial repression. The low interest rate policy has continued and the financial sector still has a clear flavor of repression. The official interest rates have been consistently lower by 50%–100% than the rates in the informal credit market (Garnaut et al. 2001).³ In recent years, a band of 10% below and 50% above the official benchmark rate has been allowed for banks when they lend to small- and medium-sized firms. However, the market rate is still 50% above the higher bound. Financial repression and the dominance of inefficient state banks have led to serious credit rationing in the banking sector. The non-state sector has suffered the most. Although its share in China's total

2. The official website of CBRC: <http://www.cbrc.gov.cn>, February 12, 2008.

3. This and the following paragraphs draw on Lu and Yao (forthcoming).

GDP surpassed 60%, this sector received less than 20% of the formal bank credit for most of the 1990s, and all the other 80% went to the state sector (Garnaut et al. 2001). As of 1998, 94% of all state bank loans went to state enterprises even though one-third of them were loss-making (Dwight 2004).

The non-state sector becomes the target of rationing for both political and economic reasons. On the political side, rationing can arise from the government's intention to maintain employment in the state sector (Brandt and Zhu 2000). Since many SOEs are inefficient, cheap credits are needed to keep them afloat. Under the constraint of limited resources, the private sector is often sacrificed. In addition, while a default by an SOE is tolerable in the Chinese banking system, a default by a private firm is sure to raise concerns as to whether the loan officer has received under-the-table benefits from the firm. It is therefore rational for a loan officer to be highly cautious when deciding upon a loan to a private firm. The economic reason is more practical. Cull and Xu (2000) find that the state banks were able to identify good firms even in the early 1990s, indicating that making profits was a goal of the banks. Most of the firms in the non-state sector are small and medium-sized enterprises (SMEs) that intrinsically have a higher risk of default than the SOEs, which are usually large and have a lower risk of failure. Therefore, the discrimination against non-state firms is essentially a discrimination based on firm size. When information asymmetry exists, this is a rational choice on the part of the banks. Lastly, credit rationing has been aggravated by the Chinese regulatory authority's imposition of a restrictive lending policy and discipline on the commercial banks. The most stringent policy, perhaps, is the "life-time responsibility" introduced in 1998, which may lead to the dismissal of a loan officer if a single loan passed through him is ever defaulted. Under this policy, it is natural to find that banks refrain from lending to firms. This was exactly what happened post 1998.

With the private sector becoming the largest sector contributing to China's manufacturing, rationing by ownership has decreased in recent years. Now, it is more common for banks to ration loans to firms based on their size. SMEs become the natural target. This has a detrimental effect on employment creation because SMEs have a much larger potential to generate employment. In addition, it also has a negative effect on regional inequality because the central and western regions have a larger number of SMEs than the eastern region.

Underdeveloped regional markets. The inadequacy of the financial structure—the lack of smaller regional banks, underdeveloped regional capital markets, and rationing against SMEs—has led to a "reverse flow" of financial resources from poorer regions to richer regions. The central and western regions are supposed to offer higher returns on investment because they do not have as many financial resources from the outset

as the eastern region does. Although there may be other causes (e.g., agglomeration and proximity to markets), the inadequacy of the financial structure must be one of the key causes. Most firms in inland provinces are SMEs. Two factors prevent them from obtaining sufficient credits. One is that there are not enough small banks that are willing to issue loans to them. During the last decade, the four largest banks closed their branches at or below the county level. This saved their operational costs but left the SMEs out of the formal financial market's reach. The other factor is that high collateral requirements prevent SMEs from obtaining loans even when there are banks operating in their areas. The lack of regional capital markets aggravates the problem by limiting residents' choice of investment to only bank savings. Every province in China is equivalent to a large country in the world in terms of its population size. Therefore, it makes perfect sense for each province to have its own capital market. The property-rights exchange centers are not adequate in connecting residents with investment opportunities because they cannot offer individual shares. Although the over-the-counter markets in the 1990s caused some problems, it does not make sense to stop thinking of developing well-functioning regional capital markets. It is time to reconsider them now.

Macroeconomic management. There still exist problems in the central bank's macroeconomic management although there have been significant improvements. Three of the unsolved issues are the independence of the central bank, mechanism of policy transmission, and regulatory tools. While there are debates on whether the central bank should be purely independent of government goals in the United States, in China, this issue is far from even reaching a point of debate. The central bank is part of the administration and therefore has to try to fulfill multiple goals, and macroeconomic stability—the key goal of a central bank—is often compromised. On the other hand, central bank policies often cannot have the desirable effects, primarily because the transmission channels are blocked by the intervention of local governments. This is a particularly serious problem when the economy faces inflationary pressures. The central bank, as well as the central government, wants to curb inflation, but local governments want to expand investment. This is a prisoners' dilemma: If government officials slow down investment in one region, the government officials in other regions will gain by continuing their pace of investment because their careers depend on short-term outcomes. This is actually one of the reasons that the central bank, like other central government agencies, often resorts to quantity instead of price management. However, quantity management often does not work because local governments, banks, and companies have various ways to get around quantity quotas. In addition, it often leads to rent-seeking behavior and thus discrimination against those who follow the rules.

11.4 ECONOMIC GROWTH UNDER FINANCIAL REPRESSION⁴

It has been shown in recent literature (e.g., Levine 1997) that financial development is one of the key factors responsible for the promotion of economic growth. Thus, it is a puzzle how China has managed such rapid growth under serious financial repression and an inadequate financial structure. The answer to this puzzle lies in the informal arrangements that economic agents create to deal with the problems arising from such a structure. This inevitably leads us to study the nexus of law, financial development, and economic growth. La Porta et al. (1998) find that the legal origin is important for the development of a country's financial market. Allen, Qian, and Qian (2005) study the Chinese legal system by using the La Porta et al. (1998) legal indices and find that the Chinese system is incomplete as compared with La Porta et al.'s sample countries. Nevertheless, they find that China's economic growth has been largely sustained by the informal sector where the formal legal system only plays a marginal role. Pei (2001) also finds that a gap exists between China's remarkable growth records and its weak enforcement of commercial contracts although the latter was improved in the 1990s. Alford (2000) points out the insufficiency of looking at only China's formal laws when evaluating the Chinese legal system; instead, he directs researchers to focus on the interplay between the formal law and informal enforcement mechanisms.

This section provides evidence of one such mechanism to show how economic agents have managed to overcome credit rationing through the leakage effect by which bank credits flow from the privileged SOE sector to the rationed private sector. In a sense, it is a case study for the idea that we put forth in Chapter 6—institutional arrangements ought to complement each other in order to take root in a society.

We start by noting again that for the most part of the last 30 years SOEs have been privileged in accessing bank loans. Private firms obtained funds from retained profits, informal borrowings, and resources leaked from the SOE sector. We will focus our discussion on the last source. There are three channels of leakage, all coming into existence in response to China's repressed financial system.

The first channel is trade credit. This practice gave rise to China's "triangle debts" problem, that is, firms owe trade credits to each other and delay their repayments. This was an area of concern for most firms through the late 1990s and early 2000s. By 2001, triangle debts reached RMB 1.5 trillion (*People's Daily* 2002). However, evidence suggests that trade credit is a means for firms to obtain finance for their working capital.

4. This section draws on Lu and Yao (forthcoming).

For example, Gao (2000) shows that the amount of triangle debts increased when the economy was overheated, especially in the mid-1990s, and decreased when the economy slowed down. Gao believes that the need for credit was a major cause for the observed pattern. What is relevant to this study is that evidence suggests the private sector to be a net receiver of trade credit (Ge and Qiu 2005). That is, financial resources are being channeled from the state sector to the private sector in the form of trade credit.

The second channel of leakage is the diversion of assets and bank credits from the state sector to the private sector. Brandt and Zhu (2000) find evidence for this kind of leakage at the initial stage of credit allocation. They show that banks tend to divert credits to the private sector whenever the central government does not enforce administrative allocation of credits that strongly favor the state sector. We can add to their finding that credit diversion also happens at the secondary stage, that is, the stage after the state sector obtains credits from the bank. Cull, Xu, and Zhu (2006) provide direct evidence for this claim by finding that SOEs with more bank credit are more likely to be suppliers of trade credit. An SOE may divert its assets and bank credits to the private sector in several ways. It can legally set up a joint venture with a domestic private firm or an international firm to release its assets into the private sector. However, there are also illegal ways to divert assets and investment. One is to divert bank loans designated for certain projects to other purposes that are realized in the private sector. For instance, there has been a consistent trend of rerouting bank credits from the inland provinces to the coastal provinces. Since the inland provinces are dominated by the SOEs and the coastal provinces are more privatized (Garnaut et al. 2005), this rerouting effectively results in a diversion of funds from the state sector to the private sector. The leakage from the state sector also takes place through the stock markets that are dominated by the SOEs. It is an open secret that listed companies divert the funds raised in the stock market for other purposes. Although no systematic statistics exist, it is fair to believe that part of the diverted funds has been channeled to the private sector because of its higher return.

The third way of leakage is managerial “tunneling,” a word coined by studies on post-privatization Russia and other former Soviet Union countries and meant to describe the diversion of firm assets by the managers for personal gains. This practice is also widely observed in China although the tunneling is not necessarily carried out by the manager alone. This is no more evident than in the process of *gaizhi*, a Chinese expression for firm restructuring whose scope ranges from incorporation to sale through the auction of SOEs. A widely observed means of restructuring is spinning off, wherein the old SOE spins off a new private firm. Most of the productive assets of the old SOE would be transferred to the new firm, leaving the old SOE with only debts, useless equipment, and old workers (Garnaut et al. 2005).

It is easy to see that all the above channels of leakage involve practices in the “grey belt,” that is, areas where legal arrangements do not clearly define the rules of the game. This leads us to study the relationship between the effectiveness of law and financial development. In most cases, the financial market should develop better when the legal system is more effective. However, a very strict legal system may hinder the efficient movement of financial resources from inefficient sectors to efficient ones—in our case, from the SOE sector to the private sector, respectively. Specifically, a lax legal system allows for risk-sharing between the bank and the state sector when it comes to risks associated with the investment diverted to the private sector. Enhancing court enforcement shifts more risk to the managers in the state sector who will then reduce investment in the private sector. As a result, private investment will fall and probably, so will the total amount of credits issued by the bank because the state sector’s demand for credit may fall. Therefore, enhancing court enforcement may hurt financial development and become detrimental to economic growth when the private sector’s access to credits is rationed. This is not to say that the law is not of use. The bank needs to rely on the law to gain some confidence in recouping at least some of its loans from the SOE sector. That is, the relationship between the law and financial development is nonlinear.

The above idea is further explored in Figure 11.1. To structure our discussions, we set the scene in the banking sector, ignore the stock market for simplicity, and make several assumptions. It is assumed that the state sector obtains finance only through bank credit and that the private sector receives finance from three channels—bank credits, other

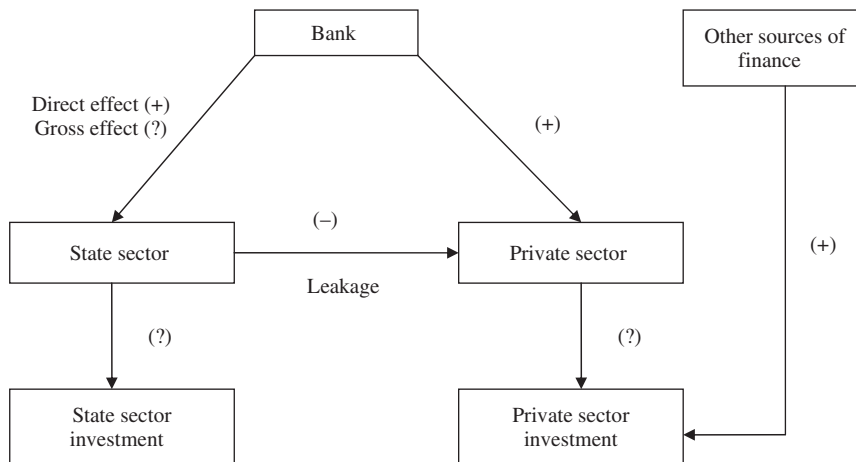


FIGURE 11.1 The effectiveness of law and financial development

Note: Symbols in parentheses indicate the direction of effects when the law is improved.

financial sources (such as self-financing and borrowing from friends and the informal credit market), and leakage from the state sector. However, bank credit allocated to the private sector is rationed. Here, we are concerned with a narrow definition of the effectiveness of law. We say that the law becomes more effective if court rulings over disputes of commercial contracts become more accurate, expedited, and effectively enforced. We are concerned with its impacts on three indicators of financial development: financial depth, share of private credit, and share of private investment, and would like to assess their relationships with the effectiveness of law. Financial depth is defined as the total amount of credits issued by the bank; private credit is defined as the amount of loans allocated directly by the bank; and private investment comes from three sources—bank credit, other financial sources, and leakage from the state sector.

When the law is enhanced, the bank's incentive to lend directly to private firms should increase because it has a greater chance to recoup its losses in case of a default. As a result, the share of private credit would increase as the law becomes more effective. In Figure 11.1, we use the (+) sign to indicate this change. In addition, private firms may get more non-banking finance from other sources as the law becomes more effective. For example, they may get more equity finance from outside investors because a better law provides better protection to those investors. This is also shown by the (+) sign. The bank is also more willing to lend to SOEs just like it is more willing to lend to private firms. However, enhanced law may reduce the amount of money diverted from the SOE sector to the private sector so the demand for credits of the SOE sector may fall. As a result, the total amount of credits the bank issues to the state sector may or may not increase. In the figure, the direct effect is shown by a (+) sign, but the gross effect is shown by a question mark (?). As a result, the total amount of investment carried out by the state sector or by the private sector is not determined either, which is shown by the two question marks (?) in the figure. In accordance, financial depth may not be improved when the law becomes more effective. However, as we noted, a minimum degree of effectiveness is required for law to give the bank confidence to lend to both SOEs and private firms. Therefore, there could exist a medium range of contract enforcement where the bank issues loans to the state sector and the state sector diverts part of the loans to the private sector. In implicit terms, the bank maintains a mixed loan portfolio, which can be optimal for its operation. With risk being shared by the bank, SOE managers' mixed investment portfolio is also optimal.

Using the ratio of cases closed among those brought to the court as a measure of a province's effectiveness in law, Lu and Yao's (forthcoming) empirical study of Chinese provinces for the period 1991–2001 establishes the following robust results: Improving the effectiveness of law alone does not lead to overall financial development in China; instead, it has a fairly large negative effect on economic growth by reducing the share of

private investment in the economy. We have found evidence for the leakage effect, which we believe is the main reason for this negative effect. We believe that our results provide a partial explanation to the paradoxical co-existence of weak law and rapid economic growth in China. However, we do not intend to refute the proposition that the effectiveness of law promotes economic growth. Less so do we mean to diminish the role of the rule of law. Rather, our results are best interpreted as evidence showing the complexity of the interplay of the formal legal system and the informal self-helping arrangements—that is, arrangements by private agents to protect their transactions—in a distorted environment characterized by financial repression. On another front that is related to the theme of this book, our results show that law is but one factor in the institutional nexus. For the legal system to work properly, improvements in other complementary institutions are needed, a conclusion echoing our theoretical discussions put forth in Chapter 6. Our findings also hint at the sequence of reform in transition countries. Although it is an ultimate goal, strengthening the legal system should not be an urgent concern when the economy is still stranded by multiple market and institutional failures. With the space left out by a lax legal system and hopefully, supplemented by informal enforcement mechanisms, private agents are able to innovate ways and means to overcome the failures and bring the economy closer to socially optimal outcomes. It is more urgent for a country in transition to eliminate market and institutional rigidities that provide fertile soil for rent-seeking behavior than to strengthen the legal system. With the rigidities in place, unlawful activities are bound to arise. In the context of China, it would be more profitable to reform the banking system, liberalize the interest rate regime in particular, than to improve the legal system.

11.5 THE EXCHANGE RATE REGIME: AN ILLUSTRATION OF GRADUALISM

The ERR is one of China's last few "fortresses" that have been under extensive reform measures, and yet it remains heavily regulated by the government. Gradualism has been the main thread in the Chinese government's approach to the ERR. However, as we will soon see in this section, this gradualism is not a blind process trying to catch up with the moving forces in the market; rather, it has been guided by rational considerations that have been regarded as vital for achieving the overall economic goals set in different stages of China's economic development. This is not to say that market forces have not played a role in driving the exchange rate reform; the evolution process of government policies toward the ERR has been shaped by interactions between intentional government choices and market and forces unleashed by other reforms.

China maintained a rigid and fixed exchange rate regime in the planned-economy era. This regime was designed to serve China's import substitution policy centered at the development of heavy industry. In general, the renminbi was heavily overvalued in order to save costs on imports that were vital for China to build its own industrial capacities. Starting in 1953 after the government had stabilized the war-damaged economy, the renminbi was pegged to the British pound at a rate of 6.893 renminbi to 1 pound. This rate was maintained until 1972 when the Breton Wood System collapsed except for an adjustment upward to 5.908 renminbi to 1 pound in 1967 when the pound was devalued by 14.3% (Wang, Guan, and Wen 2002).⁵ In 1973, China began to peg to a basket of major international currencies in response to the adoption of the floating exchange rate regime by the major industrial countries. However, the devaluation of the US dollar led to substantial appreciation of the renminbi. For example, the rate was 2.4618 renminbi to 1 US dollar in December 1971, but increased to 1.4525 renminbi to 1 US dollar in July 1980. This period of appreciation was not a consequence of the adoption of the basket approach but that of the overvaluation before it.

The economic reform at the end of the 1970s ended China's heavy industry development strategy. Exports began to assume a more positive role in economic growth, and the drawbacks of the overvalued renminbi became clearer. In response, in 1981, the government began to implement a dual-track ERR that provided two separate rates for commodity trade and non-commodity trade. Commodity trade was subjected to the internal settlement rate of 2.8 renminbi to 1 US dollar, and non-commodity trade was still subjected to the basket rate. This dual-track approach had a strong flavor of mercantilism because it provided a subsidy to exports and discriminated against capital inflow. It was soon criticized by the IMF and was abolished in 1985. A single exchange rate was set at 2.8 renminbi to 1 US dollar.

Between 1985 and 1993, the official exchange rate was heavily devalued by more than 100% to 5.8 renminbi to 1 US dollar. This period of devaluation was mainly the result of government responses to the inflation of the late 1980s. This round of inflation was the first one since the CCP came into power in 1949. The renminbi experienced substantial real appreciation due to the increase in domestic prices. This put pressure on the export sector that was becoming one of China's major growth engines. Thus, the devaluation of the renminbi was a rational choice for the government to neutralize the negative effects of real appreciation due to domestic inflation.

The evolution of the ERR was affected by reforms in other areas. One of these reforms was giving provinces and enterprises the right to retain part of their foreign exchange earnings. For commodity exports, provinces and enterprises could retain a

5. All the figures in this section have been obtained from Wang, Guan, and Wen (2002), unless specified otherwise.

total of 25% of their foreign exchange earnings, which was shared equally between the province and the enterprise. For non-commodity trade, the retention rate was between 30% and 40%. In addition to enhancing the incentives of localities and enterprises to export, this reform led to the need to establish an internal market for foreign currency trading. Apparently, localities and enterprises did not want to simply convert their foreign income at the foreign exchange window of the PBOC; they wanted to recover the premium they earned on exports. Local initiatives won again in this case. In 1980, the central government allowed local governments to establish internal regional swap centers. In 1988, these centers became open swap markets and the central government gave up all control of the market rates. As a result, a truly dual-track ERR was established. This dual-track ERR got rid of the clear mercantilist flavor of the internal settlement rate regime and served several purposes that were regarded important in the 1980s.

The first purpose was to provide incentives for localities and enterprises to export under the constraint of maintaining a certain level of foreign exchange income. China was in serious foreign-exchange shortage in the 1980s because it relied on imported equipment and technology to upgrade its domestic technological capabilities. Increasing the level of China's foreign reserves was a priority in the government's policy toward international trade. With this came a problem of uncertainty regarding the elasticity of exports to renminbi devaluation. If the elasticity was larger than a unit, devaluation would be able to increase foreign exchange revenues; otherwise, devaluation would reduce the revenues. The dual exchange rates divided the uncertainty into two parts. One was controlled by the official rate, and the other was given to the market. The "right" exchange rate—the composition of the official and market rates—was arrived at by the adjustments of the market rate, the official rate, and the amounts of goods subjected to these two rates. As a result, the government had more policy tools than what it would have under a single market rate. The differences between the market rates and the official rate were large. While the official rate was 5.8 renminbi to 1 US dollar at the end of 1993, the market rates reached 8.7 renminbi to 1 US dollar. Firms and localities that could exchange their foreign income into renminbi in the market got a subsidy. The dual-track exchange rates played a role in determining the optimal exchange rate that maximized foreign exchange revenues.

The second purpose was to deliver favors to selected regions, especially the SEZs. While other localities usually got a retention rate of 25% on their export revenues, SEZs got a rate of 100%. This provided a strong incentive for the SEZs to export. The policy was one of the deliberate measures that the central government adopted to guarantee the success of the SEZs in order to carry out the open-door policy. Stepping out of the closed planned economy, the open-door policy was politically fragile. As the showcase of this policy, the SEZs could only succeed.

The third purpose was the same as that of the dual-track system implemented for other commodities—protect the old interests. In this case, the protected were enterprises that heavily relied on imported machinery, technology, and intermediate inputs but whose products were primarily sold in domestic markets. They were usually large establishments in the heavy-industry sector and had strong political influences on government policies. However, the continuation of the import substitution policy was not a negligible factor. That is, the central government was conscious in trying to gain on two fronts—promoting exports while continuing to build domestic production capacities. In retrospect, this strategy has worked well to simultaneously increase people's living standards and upgrade China's technological capacities.

On January 1, 1994, China unified the official and market exchange rates and began a managed floating system that pegged the renminbi at around 8.27 renminbi to 1 US dollar with a small band of fluctuation. This rate was maintained until 2005 when China began to reevaluate the renminbi in response to mounting domestic and international imbalances and US pressures. In effect, China had a fixed ERR between 1994 and 2005. This regime withstood the challenges of the 1997 Asian Financial Crisis. The renminbi appreciated sharply against other East Asian currencies and there were calls from both within and outside the country for China to devalue. China resisted the temptation and contributed to the stabilization of the regional and world economy. One much unintended consequence of China's sticking to the fixed exchange rate was that China has become the "world factory," drawing intermediate goods and raw materials from the neighboring countries and exporting finished products to the world. While its ultimate merits can still be debated, it is unequivocally clear that being the world factory has contributed to China's surging growth in exports and for that matter, to China's economic growth in the last 10 years. To a large extent, the fixed exchange rate played what McKinnon calls "the role of anchoring"; that is, with the exchange rate being fixed, other economic parameters and activities will adjust and neutralize the negative effects of a fixed ERR.

At this point, it would be wise to stop our review of the Chinese experience and instead discuss the merits and drawbacks of the fixed ERR. The most obvious merit of the fixed ERR is that it eliminates foreign exchange risks and thus promotes international transactions. For a trade-dependent developing country like China, the fixed ERR provides a long-term benefit of maintaining the competitiveness of the country's exports. This merit is related to the Balassa-Samuelson effect and requires more discussions.

This effect is named after the two economists Béla Balassa and Paul Samuelson, who first studied it. The Balassa-Samuelson effect states that a country will experience real appreciation if the productivity of its tradable sector increases faster than that of its non-tradable sector. There are two channels through which this can take place. One

is through the international currency market when the country has a flexible ERR. Productivity growth in the tradable sector improves the country's international competitiveness and thus exports more. As a result, its balance of payment improves and leads to nominal appreciation of its currency. The other channel is through the wealth effect. Trade surplus increases a country's nominal income, which is spent on the domestic market. This hikes up the prices of non-tradable goods. The reason is simple—trade surplus means that the amount of money is more than the amount of goods in the country. As a result, the overall domestic prices increase and the country experiences real appreciation even if it adopts a fixed ERR.

The essence of the Balassa-Samuelson effect is the same as the basic economic logic of negative feedback—the economy will self-adjust to eliminate the initial technological advantages of a country. This would have a major implication for a developing country if it was true. It would mean that countries like China would lose their current international competitiveness and their currencies would appreciate either by nominal revaluation or domestic inflation. There have been many studies testing its validity on various types of countries. While there is a consensus that it applies to developed countries, it is less obvious whether it applies to developing countries. One factor that may weaken the effect is that structural changes, especially rural-urban migration, in developing countries slow down the price increases of non-tradable goods. One salient feature of developing countries is the existence of a large amount of surplus labor in the countryside and/or a large number of unemployed or semi-employed workers in the city. The tradable sector draws labor from the countryside and the unemployment pool so the wage rate does not increase, or at least its growth rate falls behind that of labor productivity in the tradable sector. By using data from 120 countries for the period 1994–2005, Zetian Wang and the author (Wang and Yao 2008) find that accounting for structural changes can weaken the Balassa-Samuelson effect by 14%. Essentially, their result indicates that developing countries can take advantage of their demographic dividends in choosing a fixed ERR. With such a regime, real appreciation can be delayed or weakened by a slow growth of the wage rate and a country can maintain its international competitiveness for a longer period of time.

After the abolishment of the dual-track system in 1994, the renminbi experienced a short period of real appreciation. This was partly because the initial unified rate of 8.70 renminbi to 1 US dollar was too low for China, partly due to the sharp inflation in the mid-1990s caused by domestic economic overheating following Deng Xiaoping's tour of the south. After this short period of real appreciation, the real value of the renminbi was kept at a very stable level until 2005. For example, if we consider the level in 1995 as 100, the real exchange rate index was maintained between 104.83 and 115.51 in the period 1997–2000. In the meantime, the growth of exports began to accelerate and reached an

annual average of over 20% since 2000. The competitiveness of China's exports has been enhanced in the last 10 years.

However, the wealth effect began to exert an impact after the rapid growth of exports led to a mounting record of foreign exchange reserve. At the time of writing this book (June 2009), China's foreign exchange reached US\$1.8 trillion. In fact, inflation pressures began to accumulate as early as 2003. It seems that the damping effect of demographic dividends is not strong enough to outweigh the mounting wealth effect. China is now caught between two imminent considerations—on the one hand, China still needs to rely on exports to sustain its growth in the next 10 to 15 years; on the other hand, it needs to find a way to release the pressures accumulated in the last five years. One proposal is to sharply revalue the renminbi, say, 5 renminbi to 1 US dollar, so that China can complete the adjustment in one move. However, this proposal is suicidal because it will kill most of the firms in the export sector. Another proposal is to gradually revalue the renminbi to release the pressures. The government is adopting this approach. Since 2005, the nominal exchange rate of the renminbi has been revaluated from 8.25 to 6.82 renminbi to 1 US dollar (as of July 27, 2008). Adding the rate of inflation, the renminbi has gained a real appreciation of more than 30% in the last three years. However, the pressures have not been released but have kept growing; China's foreign reserve increased by US\$800 billion in the last 18 months. With the central bank reaching the boundary of its policy possibility set, it seems that the only option left for China is to let domestic prices adjust to a level that is sufficient to release the pressures. This certainly means sharp inflation that will drastically impact the lives of ordinary Chinese. One way to neutralize this kind of negative effect is to issue treasury bonds and use the money raised to subsidize poor people. The brighter side of this option is that it spares China from the risk of sharp fluctuation of the renminbi values. For China's medium- and long-term benefits, maintaining a stable value of the renminbi is definitely a policy goal worth pursuing. However, if renminbi appreciation is only a response to short-term pressures, we will soon see the devaluation of the renminbi after those pressures are released—if they are released at all. The renminbi will thus inevitably enter a period of fluctuation.

Without a doubt, the choice facing the central government is a very difficult one. The Hu-Wen administration is promoting itself as a *weimin* (of the people) government. Therefore, keeping inflation at bay is one of its primary objectives. It is thus interesting to observe how it will strike a balance between short-term and long-term considerations in its current policy choices. In the last 30 years, the central government has deliberately set the ERR to serve a clear policy goal, in large part related to China's long-term growth perspective. The complexity this time around is that short-term factors seem to have more imminent implications than the long-term ones. However, it is still wise for

the Chinese government to place long-term considerations before short-term ones, as evidenced by its practice in the last 30 years.

11.6 CONCLUDING REMARKS

The financial sector is one of the few sectors whose transition to the market has not been fully carried out. In view of the intrinsic risks associated with the sector, there are reasons for China to move cautiously. For example, one factor that deepened the crisis in Indonesia during the Asian Financial Crisis was that many of its privately owned banks engaged in asset stripping by making relational loans to companies that belonged to the same owners. Therefore, opening up the financial sector to domestic private investors needs more stringent and well-implemented regulations. Nevertheless, the Chinese financial sector lags behind the demand raised by the economy. More serious measures are needed in the areas of liberalizing the interest rate regime, improving the size structure of the banking sector, establishing regional capital markets, giving more autonomy to the PBOC, and an exchange rate regime both supportive to long-term growth and flexible to absorb short-term imbalances.

The financial sector is a good example to illustrate the complementary nature of economic reforms. The rise of the private sector has provided economic agents with incentives to find informal arrangements to circumvent the rigidities in the financial sector. This partly explains why China has achieved rapid economic growth with a weak financial market. The dual-track exchange rate regime was also caused by other reforms that aimed at giving economic agents more autonomy to pursue economic gains. However, the Chinese government was not passive in taking the route to financial reforms. Rather, it has been conscious in keeping long-term goals behind the reforms. Chinese gradualism thus qualifies as an example of volitional pragmatism, that is, pragmatism with intentional human purposes. Or in the jargon that is more familiar to the Chinese reader, it is pragmatism with purposeful practice.

CHAPTER
12

Epilogue

China's economic success has surprised the world. This book holds the premise that China's economic success is largely attributable to the political-economic arena. Based on this premise, we have attempted to offer a coherent and comprehensive theory explaining how political governance and social conditions have helped China to arrive at a set of pro-growth policies and transform itself from a growth-retarding planned system to a growth-enhancing market system. While the acceptance or rejection of the explanations offered thus far is left to the discretion of the reader, several questions are yet to be addressed: Where does China stand after 30 years of economic reform? Are the current economic and political systems conducive to China's future economic and human development? Is the Chinese experience applicable to other developing countries? In this epilogue, we will try to offer some insights into these questions.

Needless to say, China has accomplished a substantial amount in reforming its economic system in the last 30 years. It has almost completed its transition from a public-ownership planned economy to a mixed-ownership market economy. Its approach to economic growth and reform, if it does not offer valuable lessons, challenges the prevalent ideals held by the international academic and donor communities. In particular, it raises serious concerns about the role of the government in fostering rapid economic growth and the way that a country should be governed in its early stage of economic development. Defying the orthodox view that the government should be kept at arm's length from the economy, the Chinese government has in fact been greatly involved in the micromanagement of the economy. Unlike most developing countries where popular democracy was introduced by their colonial rulers during the early stages of nation building, China, and to a large extent, other East Asian political entities, have introduced democracy in a more gradual manner or have retained considerable authoritarian elements on their journey toward becoming full-fledged democracies. Since the Second World War, only the East Asian economies have successfully caught up with the

Western world in terms of economy; hence, the relationship between the form of state governance and the economic growth rate of developing countries warrants a serious consideration.

This is of course not to argue that the stage China has reached today is the desirable state of affairs for the country. Further, it is inappropriate to believe that everything China has done in the last 30 years has been done in the right manner. Instead, we believe that the path taken by China in the last 30 years has ignored certain aspects of the betterment of the human condition. In particular, the growth consensus, despite its positive role in promoting economic growth, has led to social and economic inequality and serious environmental degradation. In addition, the emphasis on performance-based legitimacy has distorted government incentives and hindered the establishment of the rule of law and the advancement of the standard of living. There is a great need for the Chinese Communist Party (CCP), to move from performance-based legitimacy to procedure-based legitimacy. In this last chapter, we will first outline what China has achieved by economic reform and then turn to the discussion of a better future for China. Our central argument is that the key to a better China is the CCP's moving away from performance-based legitimacy toward procedure-based legitimacy.

12.1 WHERE DO WE STAND AND WHERE ARE WE HEADING?

After 30 years of reform, China has arrived at a mixed market economy characterized by a mixture of ownerships and modes of economic allocation. While the private sector has become the largest contributor to the national economy, state-owned enterprises (SOEs) still dominate strategic industries such as telecom, oil, education, and finance. Similarly, while the market has become the major venue for economic transactions, the government has maintained a heavy hand in directing the economy. Often, government regulations are not conducted through market channels, but by direct administrative controls. In addition, there are signs that local governments are forming alliances with local business elites. Reform has helped to achieve a considerable amount, but a stable model has not yet emerged. There is even a danger that a bad model would emerge in which half-baked markets would be tied to strong government power heavily compromised by interest groups. In this section, we will first highlight the current state and the prospect of each of the following three key areas—land tenure, property ownership, and government power and regulation; subsequently, we will provide a succinct summary.

12.1.1 Land Tenure

The great achievement of the rural reform has been the re-establishment of family farming. The current land tenure in rural China is characterized by a two-tier system in which the village as a collective owns the legal rights to the land, and farm households have the land-use rights and assume the role of residual claimants over the products of the land. It is an open question whether private ownership of land is the ultimate goal to pursue. For people who believe in the universal superiority of private ownership over public ownership, an affirmative answer is warranted. However, this view may have an underlying fallacy of treating private ownership as the goal instead of a means. To some extent, private ownership itself is of value because it is the foundation for several aspects of individual rights. However, as Sen forcefully argues in his seminal work *Development as Freedom* (Sen 1999), it is individual freedom, not individual rights, that people cherish. Freedom means that people can act of their own will. Equal distribution of rights may not lead to equal distribution of freedom. Under private ownership, some people accumulate more wealth and thus enjoy more freedom than others. On a more serious note, there could be a considerable section of the population who would lose their basic capacity to generate income or climb the social ladder, as is often the case. Thus, it would be socially desirable if some new configuration of rights could lead to improvement in people's basic capacities. In the case of land ownership, equal distribution of land can be a better choice than private land ownership because it guarantees the supply of food and basic income for the very poor. On a larger scale, equal distribution of land serves as a social stabilizer by supplying jobs to rural migrants when adverse shocks hit the city. Given this background, we realize that the current land tenure serves the function of providing social protection to the rural population. To the extent that social protection preserves the labor force, the current land tenure also enhances country-wide efficiency.

However, it should be realized that the social and welfare roles of the two-tier land tenure system are closely linked with the degree of cash-based social protection in the countryside. A cash-based system is more desirable than a land-based system because the latter needs labor as an input to realize its function and thus ties labor to a specific activity. After 2003, there have been positive signs that a cash-based protection system would soon emerge in rural China. The most significant progress has been the introduction of the new cooperative medical system (CMS). One of the innovations of the commune system was the CMS, which provided basic health care to the farmers. There is no doubt that this system contributed to the significant improvements in the health indicators in rural China. However, the CMS collapsed in most villages after the fall of the commune system. A new CMS was introduced

in response to continuous calls from the academia and practitioner circle. It was one of the measures that the Hu-Wen government has taken to counter-balance the adverse effects of the fervent economic growth in the 1990s. One important difference between the new and old CMS is that the latter CMS is an insurance-based system, whereas the former was financed by the brigade budget. Another difference is that the old CMS had universal and mandatory coverage, but the new one is supposed to operate on the basis of voluntary participation. Each participant is required to pay an annual premium of RMB 15. The central and the provincial governments initially provided a subsidy of RMB 10 per participant. Later, the amount of subsidy was raised to RMB 25. This is, of course, still a very rudimentary health care system, but it signals a new starting point for the country to head toward a more balanced developmental path. It is found that morbidity is the most devastating shock for farm households. By using a longitudinal dataset of 1,400 farm households for 16 years, Gan, Xu, and Yao (2006) found that experiencing a major health shock reduced a household's annual per-capita income by 11.2% and it took 18 years for a household to recover to its normal income trajectory. In addition, Sun and Yao (2006) found that when adults experience a shock, it reduces their children's chances of enrolling in middle school by 9.7%. Therefore, major health shocks have an adverse effect of plunging farm households into prolonged poverty traps. With improved medical insurance coverage, farm households can be better prepared to deal with health shocks, and the village as a whole becomes more ready to give up the two-tier land tenure system.

12.1.2 Property Ownership

After a series of arduous reforms, the Chinese economy has finally lain to rest the dominance of public ownership and has purposefully become one with mixed ownerships. Private ownership has taken new root in the Chinese society, the legal system, as well as government policymaking. The manufacturing sector and the bulk of the service sector are now dominated by private firms, and state ownership is only concentrated in the few monopolistic sectors such as telecom, banking, and education. After a series of legislation that culminated with the passage of The Property Law in 2006, the protection of private properties was acknowledged and protected by the law. Although there still exist many irregularities, governments at all levels have become more mindful of private properties, especially with regard to the government acquisition of land. The rising significance of private ownership has also been reflected by the ascendance of many private entrepreneurs to the People's Congress and People's Consultation Conference at various levels. The Three Representations have also allowed many private entrepreneurs to join the Communist Party.

These changes have been brought about by several factors. The first is the growing share of the private sector in the national economy. The private sector is no longer a supplement to the public sector, as believed in the early 1990s; instead, it has become as important as, if not more than, the public sector—a fact that has been acknowledged by the government since the constitutional revision in 1999. The second factor is the continuous open debates in academia and practitioner circles. While there are conservatives who adhere to the doctrine of holding public ownership as the core institution to realize an equitable society, there are more scholars and government officials who believe that private ownership is both unavoidable and necessary for China's continuous economic growth and social harmony. The Property Law is a good example of how public debates have played a critical role in shaping China's legislation. The first draft of this law appeared more than 10 years ago. When it was first presented to the NPC in 2005, it was rejected on the grounds that it did not provide sufficient protection to public properties. It was somewhat surprising that major opponents to the law came from the academia. However, the ensuing debates clearly favored the proponents of the law and led to the passage of the law in the NPC sessions of 2006. The third factor is related to the numerous protests by property owners, farmers, and urban house owners in particular, against infringing government actions. This is no more significant than in the case of government land acquisitions. In the countryside, it is frequently found that farmers are underpaid for the land taken possession of by the government. In the city, houses and even blocks of streets, some of which have historical significance, have been demolished without consultation with and proper compensation to the residents. Incidents of protests have led to social unrest and have finally caught the attention of the central government. Governments at various levels have become more cautious in dealing with land acquisitions. Although, by law, the state is still the ultimate owner of the land, the *de facto* ownership of ordinary citizens has been strengthened. This is clear in the case of home ownership. More than 80% of urban households own at least one apartment. Although in theory, a home owner only obtains a 70-year lease from the government for the land occupied by the house or apartment building, the prevailing expectation is that this lease would be automatically renewed at the end of the 70-year term.

The dominance of the SOEs in strategic industries is often criticized by scholars and the public. One of the criticisms is that these industries, particularly, the financial sector, are open to foreign capital but not to domestic private capital. While this criticism is valid, focusing on these strategic industries may be missing the point by overlooking the significant role played by private firms in other industries and the diminishing share of the state sector in the national economy. There is no doubt that the share of the

state sector will continue to diminish in the future. In addition, since most large SOEs are listed on the stock market, their status as state-owned firms will be weakened as the stock market becomes more regular.

It is evident that there exist many irregularities in government actions and court rulings that hurt the integrity of property rights. It is noteworthy that the starting point of these irregularities is the single-minded desire for faster local economic growth. Local governments are still tearing down blocks of old streets to make way for office and residential high rises believing that doing this will not only bring growth but also transform the city into a modern one. However, this is precisely the type of social engineering that James Scott (1998) has proven, with sufficient evidence, to be destined to fail; it is also the type of urban planning that Jane Jacobs has eloquently shown to have led to cities deprived of vivid human life (Jacobs 1961). Although compensations have been raised, the urge for a more “modern” and “beautiful” city has generally led to the ignorance of house owners’ rights to their land. In the last 30 years, the growth consensus has led to economic reforms, which in turn, have propelled high economic growth. However, as economic reforms draw close to their end, the single-minded desire for growth has led local governments to search for growth opportunities in areas where economic growth, if it would be reached at all, will lead to social and environmental destruction. In addition, frequent violations of the set procedures—be it law or rules set by the government itself—undermines the credibility of the rule of law and will ultimately hurt the government itself. It requires a more rule-abiding government to establish better protection of private properties. We will return to this in Section 12.3.

12.1.3 Government Power and Regulation

A key aspect of China’s economic reform has been *guotui minjin* (the state’s retreat and the society’s advancement). The government has given up the micromanagement of firms, quantity control of output, and most price controls. The market has become the venue of most economic transactions. Consistent with this trend, governments at various levels have been downsized. Ministries or bureaus in charge of specific industries have either been shut down or consolidated. In the meantime, government administration has become more transparent and simplified. For example, it used to take several months to get through the maze of government bureaucracy to register a firm, but now it can be done in a matter of one or two weeks. The efficacy of the government has improved, and its behavior has been subject to more public scrutiny. Finally, regulatory protocols have been established in several key areas, such as monetary policy, stock markets, the banking sector, production safety, and food safety.

However, progress has not been achieved at a constant pace. The areas that need more improvement are those related to the exercise of government power. One issue is concerned with the tools that the government uses to conduct macroeconomic management. It appears that the government still finds it easier to use quantity controls rather than price signals to regulate the economy. Quantity controls have the advantage of getting quick results, but their drawbacks are also obvious: distortions, discriminations against certain sectors, rent seeking, and larger economic fluctuations. Markets usually do not clear when quantity controls are imposed; hence, economic efficiency is lost. Governments often deliberately use quantity controls to target specific industries and even individual firms, to fulfill specific policy goals. This leads to quick results, but hurts the credibility of the government because the targeted industries and individual firms feel strongly about being targeted. In order to avoid quantity controls, economic actors will engage in active rent-seeking actions, which can easily lead to corruption and wastage of resources. Quantity controls are particularly counter-productive when governments want to use them as an anti-cyclical tool because in most cases, they lead to larger fluctuations. For example, credit quotas, if they can be effectively enforced, can have the immediate effect of cutting money supply, but the economy will also be hurt because of the sudden drying up of credit. The most important drawback of quantity controls is that they have become much less effective than before because the development of markets has allowed economic actors to circumvent quantity controls. There are many opportunities for substitutions in the economy. Using macroeconomic parameters such as interest rate can effectively prevent this type of evasive behavior because these parameters are applicable to every industry and every economic actor.

Another issue concerns the manner in which government-controlled resources are being allocated. Due to the rapid economic growth and improved efforts in tax collection, the amount of government revenues has increased tremendously in the last 10 years. Tax revenues alone reached RMB 5 trillion in 2007 (tariffs are excluded). Local governments also obtain income by selling land, and this amount can comprise up to 30% of local government revenues. Apparently, this huge amount of government revenue implies that governments at various levels have large amounts of power. However, this power has not been constrained properly. Often, the People's Congress is bypassed, and public spending is decided solely by government officials. The results are not always in favor of the general public's interests. One indicator is the prevalence of "face projects"—projects that look good but do not serve public interests—in almost every city. Unchecked government spending also gives rise to rent seeking and corruption. Almost all the exposed corruption cases are related to large government-funded projects or land transfers. More and better public participation is needed to direct government spending to purposes that benefit the society as a whole.

There is also a danger of state capture at the local level. Governments at various levels are still very strong in terms of both their administrative capacities and their possession of financial sources. This gives the rising business elites incentives to buy out government officials either to seek protection or to gain more favors. Since economic growth is almost the only criterion to judge the merits of a government official, forming an alliance with business elites becomes a safe short-cut for government officials to advance both their political careers and their financial gains. However, economic growth generated by capturing interests may not benefit the general public and thus may not last for long. The dividends of an equal society, of which a disinterested government is an important part, would be quickly eroded if this trend were allowed to continue. Central controls are insufficient to curb this trend with China's highly decentralized fiscal system. Again, more and better local public participation is needed.

In summary, markets and their supporting institutions, particularly, private property rights, have taken shape in China, but sound state governance has not emerged to guard their functioning for the society's better long-term interests. The greatest danger is that the current state of affairs would become a stable equilibrium. That is, China could be trapped in a kind of bad capitalism characterized by half-baked markets coexisting in an environment of government heavy handedness and rent-seeking government-business alliances. China's economic reform has led to the relinquishment of much of the state power to the private sector, but governments at all levels have remained strong. This is often justified by the need for rapid economic growth. However, it opens the door to business capture in an economy that is now operated by private agents other than public entities. Market forces alone cannot prevent this from happening; public participation in decision making is needed.

12.2 PERFORMANCE-BASED LEGITIMACY VERSUS PROCEDURE-BASED LEGITIMACY

The transformation that China needs can be best described as one from performance-based legitimacy to procedure-based legitimacy. On one extreme, governments in full democracies obtain their legitimacy from preset procedures centered at elections agreed to by the citizenry. That is, they are legitimate rulers as long as they win elections. In the same vein, citizens have to respect their actions as long as these actions are within the realm of the discretionary power allowed by constitutional construction. In this case, we say that the governments have procedure-based legitimacy. On the other extreme, governments in authoritarian states do not obtain their power through fair elections or other preset procedures agreed to by the citizenry. Thus, their legitimacy is often in question. Authoritarian governments seek different sources to defend their legitimacy.

In the case of China, the CCP government sought its legitimacy from economic performance in the last 30 years. It has also happened that the Chinese people have generally approved the government's performance and in a sense, have granted it legitimacy. In this case, we say that the Chinese government has performance-based legitimacy. In fact, other authoritarian governments have more or less sought the same kind of legitimacy although the kind of performance differs from country to country. Similar to what has happened in China, the Singaporean government also rests its legitimacy on the continuous delivery of economic growth. Governments in South Korea and Taiwan adopted similar strategies in their early stages of economic development. To a large extent, the right-wing dictatorial regimes in Latin America tried the same route; however, unlike the case of the East Asian economies where economic growth has benefited the general public, the fruits of economic growth were disproportionately distributed to the elites. However, there have also been authoritarian regimes, particularly the Peron regime and to some extent, China in periods of the planned era, that sought legitimacy through populist policies, that is, policies that focus on the short-term appeasement of the masses.

By restricting our discussions to the two-dimensional space of procedures and performance, we have the advantage of unifying the study of democracy and authoritarianism under one framework. This approach, which we will subsequently refer to as the procedure-performance approach, looks at countries as dots in the space defined by procedures and performance, as shown in Figure 12.1. The ideal governance structure is one at the northeastern corner that delivers performance by following procedures, and the worst governance structure is one at the southwestern corner that neither follows procedures nor delivers results. The key here is to give up the dichotomy of democracy versus authoritarianism. Even an authoritarian state has elements of democratic participation, and even a full-fledged democracy has elements of authoritarian rules. At the very minimum, the ruler of an authoritarian state needs to worry about his legitimacy. To the extent that this leads him to deliver results to the public, this authoritarian state shares some features of a democracy in the sense that it acknowledges some form of accountability that is central to a democracy. In reality, it is difficult for the ruler to fully impose his or her will on the public; some room for dissident voices has to exist. On the other hand, a democracy does not preclude the discretionary power of elected officials. Indeed, strict proportional representation is doomed to fail in a society with atomistic voters, as forcefully demonstrated by Arrow's famous impossibility theorem. Deliberations, persuasions, and coalitions are necessary for a democracy to arrive at decisions. In this process, elected officials often rely on their own judgments instead of public demands to make decisions.

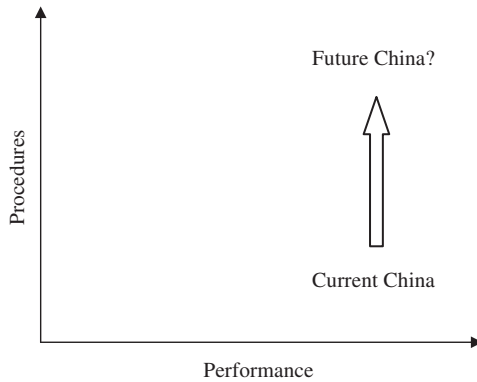


FIGURE 12.1 The procedure-performance approach

On the other hand, a democracy may not deliver performance, whereas some authoritarian states do. This sounds impossible because in theory, democracy implies that the elected officials are not necessarily held accountable to the citizenry. However, in reality, accountability may not be delivered due to several factors. We have touched upon some of these in Chapter 3. Here, we recapitulate and extend them, some in more detail. The first factor is the existence of interest groups, which Olson believes to be the most important reason for the stagnation of Great Britain after the Second World War. The second factor is related to social and economic barriers that prevent citizens from being fully informed of the process and outcomes of democracy. In some societies, social or racial stigmas marginalize some population groups and prevent them from gaining complete information or even exclude them from the democratic process. In this case, the privileged groups can manipulate democracy to advance their own interests. The third factor is the risk of a democracy being captured by extreme populist pressures. This is more likely to happen in countries with turbulent politics, corruption, inequality, or stagnant economic performance. In these countries, voters are more likely to lose patience with the government. For one thing, governments change frequently when politics is turbulent and the new government may not honor the decisions of the old government. In addition, corruption hurts voters' confidence in the government. Instead of letting corrupt officials loot the country, it is better to ask the government to distribute more. Finally, a stagnant economy reduces the value of the future and voters will rightly opt for current distribution rather than investment into the future.

The procedure-performance approach allows us to identify the conditions and find ways to improve the performance of both democracies and authoritarian states. This is not to defend authoritarianism in its outright form. Rather, this is to find the right path

for developing countries to move toward performing democracies. Developing countries still aspire to become like the successful democracies in the developed world; the conundrum is to find ways to move toward full democracy that can minimize the costs and maximize the benefits that a democracy can potentially deliver. There can be many paths, but all developing countries have to face the same challenge—finding a fine balance between extreme populism and dictatorship. Viewed against the recent history of democratization in Latin America, Africa, and to a lesser extent, South Asia, this is not an easy task. Our procedure-performance approach may help developing countries to find such a balance by analyzing democracy and authoritarianism under one framework.

12.3 A PARADIGMATIC SHIFT

The procedure-performance approach is a convenient tool for studying the successes China has achieved thus far and the challenges China has to face now and in the future. China is currently located at the southeastern corner of Figure 12.1 with high performance but low compliance with procedures. China's marvelous records of economic growth have benefited from the CCP's search for legitimacy through performance. The CCP's key credentials were called into question by the mid-1970s. The mass political movements between 1957 and 1976 had devastated the country's economy and political morale. There was an urgent sense of being discredited among the top CCP leaders. Economic growth became the obvious choice for the CCP to regain the trust of the Chinese people. There were fights on the path to economic growth though, with the radicals trying to continue and even upgrade the planned economic system and the moderates trying to break away from it. The moderates won most of the fights, not by engaging in ideological arguments, but by presenting the successes of economic experiments. The growth consensus has since become the central pillar of the CCP's ideology. As we have discussed in the chapters of this book, this consensus has helped to push forward most reforms and has led to high economic growth in China.

However, the weak side of this consensus gradually surfaced after China's economic reform moved closer to completion. One of the channels by which the growth consensus stimulated progress was its role in initiating economic reforms. Better institutions promote growth. However, the energy unleashed by reforms diminished as the objectives approached completion. Under these circumstances, the consensus led to the search for growth in other areas. The negative consequence was that this consensus developed a fixation on growth that ignored other aspects of human life. While growth in itself is an end worth pursuing, the other aspects may also have impacts on long-term economic growth. Therefore, ignoring these aspects will adversely affect growth. The following are some of the negative consequences of the fixation with growth.

The first is increasing income disparities, especially between the countryside and the city and between inland provinces and coastal provinces. Urban per-capita income is about 3.2 times the rural per-capita income. This is the highest in the world. Cities have many advantages over the countryside in stimulating growth: economic agglomeration, large markets including easier access to the world market, concentration of human capital, and so on. This is also true for coastal provinces vis-à-vis inland provinces. As a result, investments flow from the countryside to cities and from inland provinces to coastal provinces. This kind of flow should be largely efficiency enhancing unless governments join market forces by implementing policies with urban and coastal biases. However, this is what happens in reality. Although there have been some fluctuations, the central government's budget allocation has favored coastal provinces in most periods of time (Yao 2008a). For that matter, government policies have helped in widening the disparities instead of narrowing them. It is noteworthy that income disparities may just be a symptom of the deprivation of capabilities of certain groups of people to generate income. Government policies toward migrants are a good case in point.

Local governments in coastal provinces have implemented policies to keep inland migrants from settling down in their provinces although they need migrants for their economic growth. While blunt discrimination has been relatively rare in recent years, the continuation of the *hukou* system still deprives migrants of their rights to settle down. One of the consequences is the inadequate provision of education to migrant children. Bhide and Yao (2007) find that policies toward migrant children vary across cities. They depend on the linkage between migrant children's education and the recipient city's economic growth. For example, Rui'an, a county-level city in Zhejiang Province, is dominated by the labor-intensive industry and is short of labor supply because of reduced local population growth. It provides relatively adequate education to migrant children because it wants to attract current migrant workers and train migrant children to assume the role of future workers. In contrast, Beijing has a plan to develop a knowledge-based economy and does not welcome rural migrants. As a result, it does not encourage local schools to enroll migrant children although many of them do not have enough numbers of students because of slower local population growth. That is, a city's educational provision to migrant children is selectively dependent on its linkage to the city's economic growth. The growth consensus thus hurts migrant families' capabilities to generate future income.

Because income inequality is associated with the loss of capabilities, the single-minded growth habit will turn its feet onto its head in the long run. China's long-term growth depends on the continuous supply of qualified workers. In addition, an unequal society has adverse political-economic consequences on economic growth, as we have observed in other developing countries.

The second negative consequence of the fixation with growth is that it has led to serious infringements on people's rights by the government and has had the tendency to destroy the social fabric necessary for a vibrant and humane society. This is most evident in the case of land acquisition and urban renewals. In the name of economic growth, old community blocks have been turned into business or residential districts without any distinct characteristics. It is not just the loss of a kind of historic landscape that ought to cause frustration; it is more the dislocation of people and the loss of their livelihoods. For government officials, this is a price worth paying for economic growth because, to them, a small number of people paying the price brings larger gains to a majority of the Chinese. However, this kind of calculation misses the point that this has much larger ramifications for the society. For example, most Chinese cities are becoming indistinguishable as the old sections of each city are being demolished and replaced by high-rise offices or residential buildings. Together with this transformation, cities are losing their social contexts and distinctive cultures. We are making the same mistake that led to the destruction of the old Beijing City in the late 1950s.

The third negative consequence is environmental degradation. China's rapid economic growth has come at significant environmental costs. More than two-thirds of the country's rivers are polluted; most large cities are among the worst polluted cities in the world; deserts are moving closer to Beijing; and soils are being eroded in Yellow River and Yangtze River basins. The conflicts arising from environmental degradation in Shanxi, a province specializing in coal mining, are no less short of "an environmental war." However, most economists believe that environmental degradation is temporary and China needs to wait for the turning point of the Kuznets curve to begin serious environmental protection programs. Yet, many forms of environmental degradation, such as desertification, ground water pollution, and soil erosion, are not temporary. Even temporary forms of degradation, such as surface water and air pollution, come at a very high price to people's health and livelihood. The environmental Kuznets curve reflects the historical trends in developed countries. It is noteworthy that abating technologies were few and cost-prohibitive when these countries experienced rising environmental problems, but have improved greatly and have become much cheaper today. Using new and cost-effective abating technologies may assist developing countries to avoid repeating the Kuznets curve. Indeed, there is a business case for better environmental protection in both developed (Porter and van der Linde 1997) and developing countries (Shen and Yao 2009).

The fourth and more subtle consequence of the single-minded growth habit is the emerging alliance between local governments and business elites. Capital is still the scarcest productive input in China. Consequently, competing for capital is the most important task if a locality wants to achieve rapid economic growth. This is why *zhaoshang yinzi* (attracting businesses and capital) has become a slogan in most cities. Local governments

compete with each other to offer better deals to outside businesses. Those better deals are beyond what a business-friendly environment needs; some cities even offer outside businesses extra legal rights. On the other hand, local business elites are increasingly participating in local political processes through the People's Congress and People's Consultation Conference. This is a good sign showing that both the political bodies are gaining importance in local decision making; however, dominance of the business elites displays a tendency wherein China's democratization process would be trapped in a state similar to that in most developing countries where democracy in most cases implies the rule of the elites.

Local governments themselves have the tendency of becoming business corporations instead of public bodies. Jean Oi describes this phenomenon as "local state corporatism" (Oi 1992). However, it is not such a problem that local governments operate like corporations in their daily management; after all, many cities in developed countries contract their operations to private companies. The problem is that their decisions are often made in the way that a corporation makes its decisions; that is, to advance a single goal—profits, in the case of a corporation, and economic growth, in the case of a government. The exclusion of other considerations makes it easier for local governments to adopt pro-business policies and ignore the will of the general public.

Even the best government policy can turn from good to harmful when it is overdone. The growth consensus is no exception. In order to counterbalance its negative consequences, China needs to make a paradigmatic shift in its state governance model moving from seeking legitimacy only from performance to seeking legitimacy from procedure. In Figure 12.1, this is equivalent to moving from China's current position in the southeastern corner to the better northeastern corner. This, in effect, requires more institutionalized popular participation. The essence of democracy is to reach compromises following preset rules and procedures—everyone wants to ensure his or her own welfare; the minimal requirement for public decisions is that they follow preset rules; otherwise they would be challenged by people who did not get their way. More popular participation thus changes the sources of legitimacy that the Chinese government seeks—they no longer come from delivering performance but from preset procedures. This procedure-based legitimacy has the potential to mitigate the adverse impacts of the growth consensus, for several reasons.

First, it allows the government to listen to people whose welfare is either negatively affected or insufficiently raised by single-minded economic growth. The number of those people can be large and democracy binds the government to consider their concerns. Even when their number is small, democracy allows freedom of speech. This is particularly important when economic growth is argued for on the basis of some kind of a cost-benefit analysis. Based on this analysis, economic growth is favored if the overall

gains outweigh the losses, that is, if there is enough surplus for the society to provide potential compensation to the losers. The key here is that economic growth can still be favored if the losers are not actually compensated. This gives rise to two levels of problems. At the first level, the calculation involved has to rely on a single-dimensional measure in order to make a meaningful comparison. However, economic growth affects many dimensions of life. In order to make cost-benefit calculations, one has to find a common measure to make these dimensions comparable. That is, some form of substitutability has to be assumed across different dimensions of life. However, they are not substitutable for many people. For example, a person may hold on to a certain right no matter how high a cash offer is made in exchange for his right. This is the problem that Amartya Sen points out in the welfarist approach in evaluating economic development. According to him, the welfarist approach has a very narrow information base for it only considers one aspect of human life (Sen 1999). Even if one admits substitutability as a given, the cost-benefit analysis has a problem at another level in that it is valid only if its scope and horizon are wide enough. When its scope is not wide enough, some people will be ignored; and when its horizon is not long enough, some negative consequences may be ignored. For example, when its horizon is short, it makes sense for the government to tolerate environmental degradation when it promotes economic growth. However, the accumulative effects of environmental degradation can be very large, and it might be too late when the government finally realizes that it needs to take some action. Popular participation exposes the hidden costs of economic growth. It widens the information base for the government to choose between different approaches to economic growth.

Second, more popular participation provides a mechanism to break down government-business alliance. This seems to be a very optimistic claim because experiences of other developing countries show that this mechanism may not work properly. However, China may be better prepared in this aspect than other developing countries. For one thing, business elites in China have not formed a coherent social group. There are no social stigmas that impute born advantages or superiority to certain groups of people over other groups of people. Nor are there political groups that are particularly powerful yet exclusive. Indeed, the Chinese Communist Party (CCP) is a powerful political group, and there are signs that it is increasingly operating on the basis of common interests instead of common ideological convictions. However, the CCP is an open organization that admits people from all walks of life. In addition, it is not free of challenges, as we have shown in the previous chapters. The challenge for China is whether widening economic disparities would hinder truly popular participation. Income inequality is increasing in China. This is particularly true for the urban-rural divide. There are signs that rural residents are under-represented in the current political system. However, both the urban-rural divide and under-representation of rural people

are results of institutional suppressions that rural residents have to endure. With more popular participation, they will both change because rural residents, who comprise the largest group in China, will vote against these suppressive institutional arrangements.

Third, the procedure-based legitimacy defuses government officials' responsibilities toward economic growth and thus lowers their incentives to engage in single-minded growth. This is because they no longer need to derive their legitimacy solely from performance, but can also do so via the procedures that elect them to office. This does not imply that democracy reduces government officials' incentives to deliver results to their constituencies; rather, it means that government officials do not need to concentrate on a single performance indicator, which is most likely economic growth. The need to seek re-elections induces government officials to tend to the comprehensive interests of their constituencies. Since delivering performance is still regarded as the key element for the CCP to gain legitimacy, promotion of government officials is heavily based on a few performance indicators among which economic growth is the most significant. This gives government officials huge incentives to deploy whatever means they have in hand to drive faster economic growth. "Forcing people to become rich" is not a joke, but a reality in many localities. Often, strong administrative measures are deployed to force farmers to plant certain types of crops or to force urban residents to engage in certain economic activities confined to certain areas. In most cases, these forceful measures end in dismal failures. One of the reasons for these failures has been the elimination of diversity in economic activities. People are different in terms of the stock of human capital, the stock of physical assets, and aptitudes toward risk; hence, diversification is necessary for them to fully utilize their comparative advantages defined by these factors. Forcing people to "become the same" or forcing people to "become rich" can only lead them to become poor.

The current Chinese system has a good stock of elements that support the procedure-based legitimacy. In addition to an equal social structure, the Chinese political system has a certain degree of flexibility that admits popular participation with varying qualities and institutional foundations. The Chinese Constitution lays out a framework that allows a considerable amount of popular participation. The village is defined as a self-governing entity. That is, it is the onus of the farmers to elect their leaders and decide on village affairs. Above the village level, delegates are required to be directly elected to the township and county people's congress—the local legislative body. The same thing is true for the people's congress at the district level in the city. Above the county and district levels, delegates are elected indirectly to the municipal, provincial, and national people's congress by county and district people's congress. At all levels, the People's Congress has rights that are equivalent to those held by the parliament in any other country. The problem is that those rights may not be fully exercised in reality. However, there is also good progress at the ground level.

The most significant progress is the existence of village elections. China started to experiment with village elections as early as the 1980s. In 1988, the National People's Congress (NPC) passed an experimental version of The Organizational Law of the Village Committee that required the village committee, which is the self-governing body in the Chinese village, to be elected. This law triggered widespread elections across China. In 1998, the NPC passed the formal version of the law. The most significant feature of this formal version is that it requires that the candidates of the village committee be nominated by the villagers. Today, almost every village conducts democratic elections. The outcomes of the election are quite encouraging; studies have found that it has enhanced the accountability of the village committee. In particular, it has increased the share of public spending and reduced the share of administrative spending in the village budget, improved income distribution, and led to more public investment (Zhang et al. 2004; Wang and Yao 2007; and Shen and Yao 2008). The positive impacts of elections on income distribution are of particular interest here. Income distribution can be improved only if the poor have maintained a higher income growth rate than the rich. Therefore, village elections must have induced the village committee to adopt pro-poor policies, that is, policies that help the poor more than the rich. One obvious policy is to adopt a more progressive redistributive scheme. However, both Wang and Yao (2007) and Shen and Yao (2008) do not find that elections lead to such a policy. Instead, Shen and Yao (2008) find that elections improve income distribution by more public investment. Since the poor rely more on locally provided public goods than the rich do, more public investment by the village committee helps the poor more than the rich. Income distribution is not necessarily a concern for government officials if only performance is emphasized for the CCP's legitimacy; this is because the link between an equal income distribution and economic performance is not easily detectable. Village elections shift the source of legitimacy from end results to the procedures that elect the village committee. In order to win the majority support in the village, the village committee has to cater to the demand of the poorer sections of the village population that almost certainly outnumber the richer sections.

Above the village level, delegates to the township, county, and urban district people's congresses are directly elected, as required by the Constitution. Although nomination is not free from government interference, there are signs that the election has become more competitive in some localities. Concurrently, county and district people's congresses are becoming more effective in monitoring government functioning, especially budget allocations. At the national level, both the NPC and National People's Consultation Conference (NPCC) are admitting into their fold more members with professional backgrounds. Although the political structure has remained more or less intact, adding these new members will enhance the ability of the two legislative bodies to monitor the government.

There is also considerable room for free speech within China's one-party system. Although there still exist areas—particularly, foreign policy, religion, and the one-party rule itself—where open public discourse is restricted, the press is quite frank in other areas including government policies in social and economic arenas, corruption, and democratization. In addition to traditional media, the Internet has provided unprecedented freedom for personal expression including expression of dissident views about China's political system. These views have gained importance in China's political process. Government leaders at various levels take them into account in their decision making. Intellectuals have actively participated in public debates, and their views are often heard and considered by government officials. Although a certain degree of censorship still exists, intellectuals are often tolerated even when their views sound very radical.

A new development amiable to the procedure-based legitimacy is that the civil society has become much stronger in today's China. Non-governmental organizations have been accepted by the government at least as a complement to governmental actions. More important, yet subtle, development is ongoing at the grassroots level. Old communities have found a new lease on life with the increase in stability and income, and new communities are emerging on the basis of common interests in addition to geographic proximity. This includes private clubs of common interests (driving, tourism, and so on), intellectual circles, as well as residential communities. The Internet plays an important role in these grassroots organizations. Although politics is often deliberately excluded from their agendas, these newly emerged communities will quickly form organized resistance once their interests are infringed upon by the government.

Finally, the Chinese government is under great international pressure to improve its governance at home. China is an emerging economic power and wants to become a significant political power that is respected by the world community. This aspiration has led the Chinese government to be concerned about the world's opinions regarding its functioning. This is a sign of flexibility in its own right; moreover, it motivates changes for the better. International criticism is conducive to China's democratization process as long as it is articulated in a constructive manner.

In summary, seeking performance-based legitimacy has helped China to achieve rapid economic growth in the last 30 years; however, its negative consequences have become much stronger in recent years when growth led by institutional reform has lost its steam. In order to mitigate these negative consequences, the CCP needs to pay greater attention to procedure-based legitimacy. In terms of the preparation that China has mustered up to now, this shift is not as radical as it appears to be. The CCP is beginning to push through "the third thought liberation"—the first being the truth debate in 1978 and the second being the reform drive after Deng Xiaoping's 1992 visit to the south—that aims at a paradigmatic shift in the development strategy to take into

account environment and social harmony. In an increasingly diversified country, however, social harmony cannot be obtained if basic procedures protecting people's rights are not respected. The third thought liberation signals a new wave of ideological shift on the part of the CCP. Like the previous shifts, this shift is likely to open a new era for China. However, similar to the previous shifts that emphasized economic growth and market building, this shift is likely to lead to changes in government structure and political system.

12.4 LESSONS FOR OTHER COUNTRIES

China used to be a type of role model that others aspired to emulate. That was Mao Zedong's China. However, China has undergone a great transformation since Mao's demise. It has become a radically different China. Many people are disappointed and even disillusioned; others have buried Red China deep in the recesses of their memory, just like they have buried their youthful dreams. However, for people inside China, China's transformation is not only necessary but also beneficial. China is far from perfect; people's income level is still low. However, as compared to 30 years ago, today the Chinese have a reason to place confidence in their government.

To a large extent, every country is unique because of its different historical and cultural heritage. China is no exception. It had a glorious history of cultural and technological achievements, which inspired its modern leaders to devote themselves to the cause of China's revival in the modern age. Its Confucian doctrines place strong moral constraints on government officials. Even the authoritarian tradition may have lent some assistance to China's economic growth as it led to a more disciplined society and people were more willing to subordinate their personal interests for the common good.¹ However, these peculiarities do not prevent us from finding those elements of the Chinese experience that have international implications.

The most significant element is that a disinterested government is the key to sustained economic growth and social justice. It is common to find that governments in developing countries alternate between left-wing populism and right-wing authoritarianism. Right-wing governments form an alliance with the business and social elites and adopt the so-called liberal economic policies. In contrast, left-wing governments often adopt populist policies to please the people. Neither approach has led to sustained economic growth. The Chinese experience offers an example of how it is possible to have a disinterested government and how it helps a country to reach sustained and inclusive economic growth.

1. A footnote to this assessment is an interesting observation offered by an American friend of the author's who lived in Singapore for a long time. Commenting on Singapore's achievements, he remarked: "Singapore has a government that is good at governing; it also has a people that is good at being governed."

The second lesson of the Chinese experience is concerned with the causes for a disinterested government to survive in a country. Among them, an autonomous ruling group subjected to challenges is perhaps the most important for other developing countries. By and large, social and business elites still dominate the political stage in developing countries despite the existence of nominal democratic institutions. As a result, the ruling party has to either form an alliance with these elite groups in which case it loses independence, or resort to people's populist sentiment to defend its rule. An autonomous and challenged ruling group is important for two reasons. On the one hand, stability is crucial for any ruling group to be concerned with the long-term interests of the whole society. On the other hand, the lack of challenges eliminates their incentives to care about other people's interests. In China, these two problems are solved by the presence of the CCP whose ruling position is secure enough for it to be concerned about China's long-term interests and who, at the same time, faces constant challenges to its legitimacy. Under a democratic framework, the solution to the two problems seems to be easier to find because the elites have been there from the very start and the democratic institutions should impose challenges on them in a natural way. However, we do not observe this happening often in reality.

This leads to the third lesson from the Chinese experience, which is related to the social structure of the country. As compared with other developing countries, one of China's unique features is its social equality. Social inequality means that certain groups of people enjoy privileges that are either intrinsically bestowed by the social structure or difficult to challenge within the institutional limits. In a country with significant social inequality, the privileged elites thus do not have incentives to be concerned about the interests of other groups of people. This not only explains why many right-wing governments feel free to adopt pro-business policies but also explains why many left-wing governments adopt populist policies—often, these policies are either used to exact revenge on the elites, or as a tool to secure the left-wing government's rule facing the challenges of the elites. Social equality does not eliminate the existence of elites, but eliminates their institutional and social foundations so they are exposed to real challenges from ordinary people.

China's economic success has raised both hopes and worries in the international communities. The hope is that a poor country can quickly gain momentum while catching up with the developed world; the worry is that authoritarianism may spread as a result of emulating the Chinese model. When concluding this epilogue, we would like to emphasize that the key to China's success is not its authoritarianism, but its insistence on maintaining a disinterested government. China's social and economic structures have helped it achieve that, but the CCP's conscious adjustments have also played a critical role. With sufficient will, other developing countries can emulate.

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