3 The Socialist Era, 1949–1978: Big Push Industrialization and Policy Instability

After the People's Republic of China (PRC) was established in October 1949, the Chinese economy was wrenched out of its traditional framework and completely reoriented. China's new leaders turned their backs on China's traditional household-based, "bottom-heavy" economy, and set out to develop a massive socialist industrial complex through direct government control. Planners neglected labor-intensive sectors suitable to China's vast population, and instead poured resources into capital-intensive factories producing metals, machinery, and chemicals. The early achievements of coastal enclave industrialization oriented to the Pacific were discarded, and a new inward-directed strategy was adopted. China turned to the Soviet Union as its primary model, as well as its chief trading partner and source of technology.

For 30 years, China pursued this vision of socialism. We label this development strategy "Big Push industrialization," because it gave overwhelming priority to channeling the maximum feasible investment into heavy industry. This development strategy, in turn, shaped virtually every aspect of the Chinese economy. The first section of this chapter covers the "Big Push" economic strategy, which describes the overall pattern in which resources are allocated. To implement this strategy, a planned economic system was phased in between 1949 and 1956 (and then phased out after 1979). The term "economic system" describes the institutions that govern specific resource-allocation decisions: this is covered in the second section of this chapter. The type of system China adopted is often called a "command economy," because market forces were severely curtailed and government planners allocated resources directly through their own "commands," which were the crucial signals in the economy. The command economy was a very effective way to subordinate individual economic decision-making to the overall national development strategy.

Even though the general framework of Big Push strategy and command economic system covered China's pursuit of socialist development throughout this period, the framework was interpreted differently over the years, and policy shifted in ways that were unpredictable and disruptive to the economy. Indeed, economic instability and a pattern of policy oscillations marked the years through 1978. This chapter uses the framework of policy instability to describe some of the most important episodes during China's socialist period. A few distinctive and successful Chinese adaptations were made to the Big Push/command economy model, and some catastrophic and misguided policies were followed. The GLF stands out as the most peculiar, and the most terrible, of all these episodes, overshadowing even the Cultural Revolution. Since 1979, China has gradually dismantled virtually all the institutions of the command economy. Nevertheless, the legacy to China's contemporary economy from the period of the socialist planned economy is large and complex. Indeed, no area of the contemporary economy completely escapes the aftereffects of the command economy. We conclude with a brief assessment of the socialist period and its legacy.

3.1 THE BIG PUSH DEVELOPMENT STRATEGY

After 1949 the PRC followed a socialist heavy-industry-priority development strategy, or Big Push strategy. Consumption was squeezed, as rapid industrialization was given highest priority. The government controlled the bulk of the economy directly and used its control to pump resources into the construction of new factories. Investment, virtually all of which was government investment, increased rapidly to over a quarter of national income. Investment rates worldwide have risen since the 1950s, but even today poor countries on average invest 20% of GDP. China, by 1954, at a time when it was still a very poor country, had pushed its investment rate up to 26% of GDP. (See Figure 3.1, which shows gross capital formation—the sum of new investment in physical assets, replacement investment, and accumulation of inventories—as a share of GDP.) Investment soared further during the GLF, but then crashed in the catastrophic aftermath of the Leap. Over the long term, as Figure 3.1 shows, China's investment rates have been high and rising, though sometimes unstable.

Most investment went to industry, and of industrial investment, more than 80% was in heavy industry. With planners pouring resources into industry, rapid industrial growth was not surprising: Between 1952 and 1978 industrial output grew at an average annual rate of 11.5%. Moreover, industry's share of total GDP climbed steadily over the same period from 18% to 44%, while agriculture's share declined from 51% to 28% (measured at current prices; see Chapter 6 for further discussion). Entire new industries were created—for

Figure 3.1 Investment As a Share of GDP

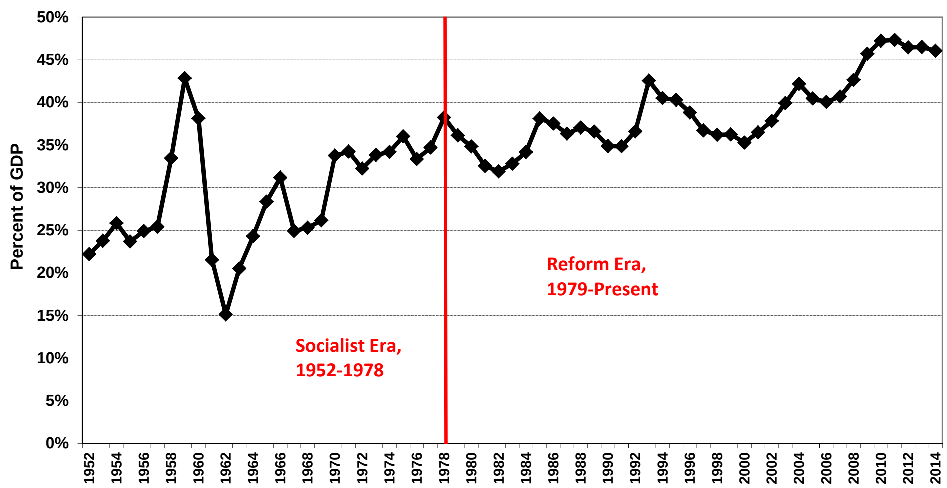

Figure 3.1
Investment as a share of GDP

example, those producing electric generating equipment, chemical fertilizer, and motor vehicles. Most important, economic growth was jump-started, after the stagnation and disruption of the depression and war years. The Chinese economy took off during the 1950s, and the Big Push strategy seemed to be working. The new government was able to mobilize the fiscal and other resources to finance a sustained investment effort.

The PRC was not the only part of East Asia where growth accelerated in the 1950s. Hong Kong and Taiwan underwent rapid industrialization, and they did so largely by following the strategy of development that the PRC had abandoned. A direct comparison of strategies can provide further insight into growth in all these regions (Table 3.1). It is possible to view the entire industrial economy as a series of "value chains" or streams that connect many different activities. At the top of the stream is natural resource extraction and materials industries; these feed in to refining, processed-materials, and machinery industries; and ultimately at the bottom of the stream are final products for businesses and consumers. China, with its heavy-industry–priority strategy, focused on industries in the upper and middle stages of the industrial economy. These industries can be considered "strategic," in the sense that they have the most linkages with other industries. For example, an industry such as steel has important linkages "downstream," because if it supplies high-quality, low-cost steel to machinery and equipment makers, it will lower their costs and

Table 3.1
Two contrasting industrialization strategies

	Heavy-industry–priority, PRC	Light-industry–priority, Taiwan, Hong Kong
Basic strategy	Strategic industries with most upstream and downstream linkages	Begin with downstream consumer goods industries; gradually work upstream
Saving done by	Government, state-owned enterprises	Households, private business, government
Investment decisions	Government	Private business, government infrastructure
Source of demand growth	Domestic industries, government investment projects	Foreign and domestic consumer-goods markets
Household income	Slow growing	Moderate to fast growing
Coordination by	Plan	Market, with some government "steerage"
Openness to world	Low	High

stimulate their development. But steel also has important linkages "upstream," because its growth increases demand for coal, iron ore, and specialized machinery, stimulating the growth of those industries as well. (An input-output [I-O] table is a tool that shows all the direct supply relationships between sectors, and it can be used to quickly compute the full direct plus indirect implications of any change in output or demand.) Growth based on heavy investment in strategic sectors tends to create a self-reinforcing, but also self-contained, process. Heavy industrial sectors are developed that supply each other's demands, based on the government's investment decisions, but there are limited spillovers to market development. Such an approach goes easily with a strategy of national self-reliance and limited openness to the outside world.

Hong Kong and Taiwan, by contrast, specialized first in textiles, food products, and other light consumer goods. In other words, they concentrated on the "downstream" end of the industrial value chains. These are also the "early industries" in which most developing countries begin their industrialization process. Not accidentally, they were also the most important sectors in China's "enclave industrialization" during the 1920s and 1930s. Indeed, in some cases, it was the same people running the factories: many Shanghai textile entrepreneurs moved to Hong Kong in the 1950s, and other Shanghai businessmen went to Taiwan. The markets for these industries were primarily abroad, particularly in developed countries. Openness to trade meant that industrialists could obtain their inputs—raw materials and equipment—on the world market. Only later, after successful light-industry development, did Taiwan and Hong Kong move "upstream," developing industries that were more technologically demanding and capital-intensive, sometimes with government help. It is striking that Hong Kong, Taiwan, Korea, and Singapore all made a relatively smooth transition from their early light-consumer manufacturing to more technologically demanding sectors, and economic growth accelerated in all four of these economies in the 1960s and 1970s. In other words, despite the absence of domestic interindustry linkages in the initial phases of industrialization, Taiwan and Hong Kong were able to more than compensate through other advantages of openness. Cheaper production because of access to lowest-cost inputs from the world market, faster absorption of world technology, and faster learning about export markets led to more rapid growth of living standards, and ultimately to a more rapid convergence to world best practice. Thus, although growth accelerated in the PRC under the impetus of the Big Push, growth accelerated even more in other parts of East Asia at the same time. By 1978, Taiwan and Hong Kong were far ahead of the PRC and served an important demonstration effect in convincing Chinese leaders to reform and open up the economy. When, after 1979, the PRC finally reoriented its development strategy and modified the Big Push strategy, it discovered that there were many unexploited opportunities in light manufacturing and export markets. China returned to those neglected opportunities, often in collaboration with businesses from Hong Kong or Taiwan. (See Chapters 16 and 17 for a description of the interaction among the economies of the PRC, Hong Kong, and Taiwan in the contemporary period.)

3.2 THE COMMAND ECONOMIC SYSTEM IN CHINA

How did planners manage to channel resources into their Big Push industrialization strategy? What were the key institutions that shaped the way decisions were made? China adopted the "command economy" system from the Soviet Union, and it had the following fundamental characteristics:

- The government owned all large factories and transportation and communication enterprises. In the countryside, agricultural collectives took over ownership of the land and management of the farm economy.
- Planners issued commands that assigned production targets to firms and directly allocated resources and goods among different producers. Prices lost their significance as the primary signal that directed resource allocation in the economy. Finances were used to audit and monitor performance, not to drive investment decisions.

- While the government neglected the microeconomic allocation role of prices, it nevertheless controlled the price system and set relative prices to channel resources into government hands and into Big Push industrialization.
- The government and Communist Party reinforced their control of the economy through a hierarchical personnel system, in which the Communist Party controlled managerial career paths.

These were the characteristic institutions of the system created initially in the Soviet Union under Stalin. China copied them during the 1950s. As we shall discuss, during the 1960s and 1970s, China altered these institutions to fit with Maoist ideology and to accommodate an economy that was much poorer than its Soviet mentor.

The government owned the factories and controlled the price system, and not surprisingly, factory products were expensive and farm products were cheap. That is, the socialist state intentionally assigned prices to the products of industry (owned by the government) that were relatively high, and assigned prices to the products of agriculture (owned by peasant collectives) that were relatively low. The socialist state maintained terms of trade between the state-enterprise sector and the household sector that were highly favorable to state enterprises. In 1953 (even before agricultural collectives were formed) the Chinese government established compulsory procurement of grain from farmers, creating a government monopoly over key agricultural goods that lasted more than 30 years. Farmers were forced to meet procurement quotas established by the state grain monopoly, at low fixed prices. With cheap farm products, the "markup" on manufactured consumer goods was high (on cotton cloth, for example), while wages were kept low and stable. Given these systematic biases in price setting, agriculture seemed to be a "low-return" activity, while manufacturing appeared to be highly profitable. But not wanting too many farmers to leave the farm, the government imposed restrictions on mobility (see Chapter 5).

The surpluses of government-controlled firms made up the main source of government revenue. The distorted price system meant that state-owned industrial enterprises were extremely profitable—even when they were not very efficient—and they served as a "cash cow" for the government and for the economy as a whole. This system is what gave the Chinese government the fiscal capacity to mobilize resources for Big Push industrialization and its other priorities. A modern tax system was not necessary: Already by the mid-1950s, government could raise more than a quarter of GDP as budgetary revenues, an impressive level for such a poor country and far higher than anything achieved by the Nationalist government before the war.

After establishing the essential prerequisite of government control over the economy, specific decisions were implemented through the planning system. "Material balance planning" was the main technique used to actually run the economy. The term "material balance" refers to the computation of sources and uses of an individual commodity that a planner "balances" in allocating all supplies. Planners simply assigned "quantities" and ignored "prices." There were output plans for individual producers and supply plans that transferred resources among producers. In theory, a planner could use an input-output table to compute the interdependent needs of the whole economy. In practice, though, China was too big and its producers too diverse for planners ever to have been able to coordinate the economy through a single technical device. Instead, planners divided blocks of resources among different stakeholders, drew up their own wish lists of priority projects and the resources they needed, and then allocated anything left over to the numerous unmet needs. The foreign sector could be used as a last resort to make up for scarcities and sell surpluses.

Other types of control were used to reinforce control over materials. Control over personnel was exercised through the *nomenklatura* system. The *nomenklatura* is a list of urban jobs that are controlled by the Communist Party, which thereby manages personnel throughout the public sector. The Communist Party set up a strict hierarchy, in which each level supervises the performance and appointment of personnel at the next lower level. As a result, control of career paths, and thus of the ultimate incentive structure, rests with the Communist Party. Finally, control over financial flows and credit was also exerted from the top, typically through a state monopoly banking system (or "monobank") that audited compliance with state directives. Prices, profits, money, and banking all existed in this system, but the financial system was "passive." That is, financial flows were assigned to accommodate the plan (which was drawn up in terms of physical quantities), rather than to independently influence resource allocation flows. The only exception was for household budgets: households could decide how to allocate their incomes among a limited supply of consumer goods.

With all the plans, commands, and controls, the typical state-owned enterprise had very little authority. It could not adjust its labor force, did not retain any of its profits, and could do little other than scramble to find additional inputs and increase production. Yet at the same time, the core planning system in China was much less centralized and much less tightly controlled than it was in the Soviet Union. Small firms were more important in China's industrial structure than in the Soviet Union. Transportation and communication were less developed, so it is not surprising that central control was exercised less effectively. For example, central planners in Beijing allocated a maximum of 600 different varieties of industrial product, while the Soviet Union by the 1970s had allocated 60,000 separate commodities. In other ways, too, China's system was less centralized, especially in the 1970s, after financial decentralization reinforced decentralization of the planning system, providing local governments with substantial leeway in making economic development decisions. Arguably, there was less decision-making authority at the top (central government) and bottom (enterprise) of the Chinese industrial economy. More authority, however, could be exercised by those in the middle, typically local government officials.

But in one respect, China was substantially more controlled than the Soviet Union: ideological and social control was especially tight. Politics was "in command" during the Maoist years, and the Communist Party rigorously controlled speech, and even thought. China maintained very strict controls over labor, including restrictions on movement and on remuneration. Migration to urban areas was tightly restricted, and during the Cultural Revolution, 17 million urban school-leavers were sent out to the countryside (see Chapter 5). Employees in state enterprises stayed in a given enterprise for life, sometimes even passing jobs on to their children. Labor mobility was virtually nonexistent. It was illegal in principle and impossible in practice for firms to fire workers, and quits were also almost unknown. Despite decentralization, the system in many respects was extremely rigid.

3.3 POLICY INSTABILITY

China's history since 1949 has been a stormy one. Even after the 1949 revolution, sharp turns in policy—including economic policy—marked nearly every period of China's development. Changes, and even reversals, of direction were common in many areas of economic policy. As a result, the legacy of the socialist period is especially complicated. In some periods the policy emphasis was so distinctive that it has been described as a unique Chinese or Maoist "model" of development. At other times policy stayed closer to an orthodox Soviet model or was driven by short-run pragmatism. These different periods had very different economic outcomes, ranging from highly successful to catastrophic.

Shifts in economic policy often came with sharp political conflict. Mao Zedong himself repeatedly changed economic policies in accordance with his own revolutionary ideals or personal wishes. He often portrayed the resulting policy changes as part of his own personal struggle against political opponents.

The Communist Party has consistently monopolized political power since 1949, so major policy issues have often played out as internal power struggles dividing the party. Winners in factional fighting have used policy advocacy to prevail over their opponents, and have imposed policies they favored once they won power. For all these reasons, the twists and turns in policy in Maoist China are generally narrated from a political point of view. While acknowledging the importance of politics, this section provides a brief narrative of the 1949–1978 period in which the emphasis is on economic changes and political factors are downplayed. This approach allows us to present a compact narrative while also capturing the diversity and instability of policy orientations.

One approach to this topic is provided by the data shown in Figure 3.2. The figure shows the percentage growth of investment in each year (using the same underlying data as Figure 3.1). The data show clearly the successive periods of rapid investment growth, followed by slower growth or even decline. Figure 3.3 gives labels to five successive waves of rapid investment growth. Each time the growth of investment in a single year surpasses 20%, it signals a "leap forward." Each "leap" is a phase of more rapid investment growth, but also corresponds with a period of political mobilization and institutional transformation. "Leaps" tend to be radical, or leftist, phases of maximum social change. Five cycles of political and economic mobilization are evident in the Chinese

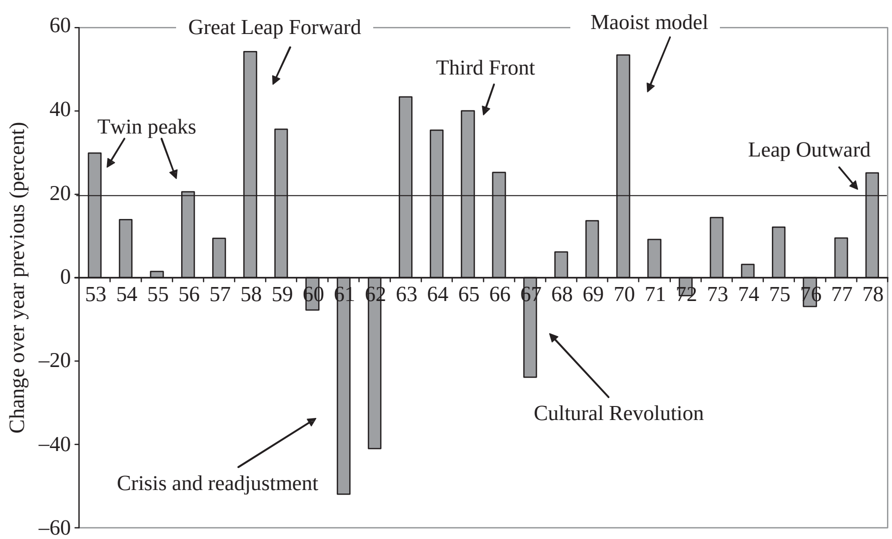

Figure 3.2
Growth of investment

data. Typically, each leap was followed by a phase of retrenchment, consolidation, and slower investment growth. Often, these retrenchment phases were characterized by a more moderate political climate as well (although the early Cultural Revolution, 1967–1968, is an important exception). Thus investment cycles correspond to policy cycles and recurrent policy conflict. Policy swings like a pendulum from left to right and back again, driving and in turn being driven by economic developments. This approach can provide a simple framework to organize the complex history of socialist China, and it allows us to divide the era into subperiods that are quite different from those used by the Chinese government.

3.3.1 Economic Recovery, 1949–1952

The new leaders of China came to power in 1949 committed to building socialism in China, a commitment which, to them, meant that they would recreate in China a version of the Soviet economic model. After all, they were a Communist Party, and there is no evidence during the early years of a fundamental debate or disagreement among the leadership over the desirability of adopting the Soviet model. However, it was by no means certain how rapidly China should (or could) build a Soviet-style system, nor the extent to which China would seek to precisely emulate Soviet practices. China faced immediate economic problems. Wartime damage to industry and agriculture had been substantial, and hyperinflation was raging. The invasion of South Korea by North Korea in June 1950 greatly intensified the hostility the capitalist powers felt toward the new Communist Party government. A trade boycott against China was instituted, as Chinese intervention turned the Korean War into a protracted stalemate. These events pushed China into an especially close embrace with the Soviet Union, while also keeping Chinese policymakers focused on the need to be prudent and careful. In fact, the government was able to move rapidly to restore the domestic economy and experienced a remarkable run of successes in the first few years. Tight control of the budget and money supply brought inflation under control by the end of 1950. At the same time, industry and agriculture were both rehabilitated fairly smoothly. By 1952 both industry and agriculture surpassed their highest prerevolutionary levels, and the stage was set for a new phase of development. The signing of an armistice in Korea in the summer of 1953 cleared the path for a new era.

What is particularly striking during these early years is how effectively the new government adapted its ideology to the economic and political challenges of the day. In the countryside, the party pushed through a radical land reform. Communist party workers descended on rural areas throughout the country to distribute land to poor peasant households. Between 1950 and 1952—while the Korean War was raging—42% of China's arable land was redistributed, much of it in the south where Communist guerrillas had not previously carried out land reforms. At this stage, land was still owned privately by households, but ownership of land was largely equalized. In this way the Communist Party consolidated support among average and poor farmers and destroyed the economic and political power of landlords. At the same time they deferred until later the question of how rapidly farmers would be organized into agricultural collectives.

In urban areas the new government took over many factories, including those expropriated from the Japanese after the war and those belonging to the Guomindang or to capitalists who fled China after the revolution. But policy was generally welcoming to other social groups. Under the rubric of "New Democracy," the Communist Party welcomed those non-Communists who were willing to work with the new government. Capitalists who were willing to stay in China—and there were many—were encouraged to expand production at their factories. Quite a few of the planners who had worked for the NRC in the Nationalist government were willing to continue working for the Communist government in the same capacity. Many intellectuals and scientists were convinced to contribute their skills to the construction of the new China. By putting skilled entrepreneurs and technicians to work, the government was able to revive industry surprisingly quickly. The government's own investment was focused on the Northeast, which was critical to the Big Push development strategy, since it contained the largest and most important heavy industries. Ironically, these factories had initially been created by Japanese investment as part of Japan's own state-sponsored industrialization program, and had been taken over by the Russians at the end of World War II. Now, the factories passed into Chinese government hands and were rehabilitated fairly quickly with Soviet aid. The heavy industries of the Northeast became a testing ground, where the institutions of the command economy were introduced for the first time. By the end of 1952, economic recovery and rehabilitation had become a resounding success. This was the signal that the time had come to launch socialist industrialization nationwide.

3.3.2 1953 and 1956: The Twin Peaks of the First Five-Year Plan

The five years from 1953 through 1957 are described by Chinese official media as the period of the First Five-Year Plan. In fact, it was a period of nearly constant policy change and adjustment. While the basic Soviet model was not in question, there were serious policy issues concerning the pace of transformation, the degree of centralization that was appropriate for China, and the appropriate policies on wages and incentives in urban areas, among other issues. Soviet-style institutions were put in place, especially during two periods of mobilization and rapid change that were followed by periods of retrenchment and consolidation. Ironically, even though the direction of change was consistently toward a Soviet system, the reality on the ground was one of a mixed and diverse economy through most of the period, because the Soviet model had not yet been imposed in monolithic form. This point is important because the period was one of dramatic economic success.

During the 1950s every aspect of Chinese society was subject to massive influence from the Soviet Union. The Soviet Big Push strategy and the command economy system were copied wholesale. At the same time, Soviet industrial technology and organizational design were transplanted into China. The "twin peaks" of especially rapid change came in 1953 and 1956. In the first peak (1953), investment was ramped up quickly as part of the beginning of nationwide investment planning on the Soviet model. Compulsory agricultural procurement was adopted. The very first Five-Year Plan, nominally covering 1953 through 1957, was drawn up "half in Moscow, half in Peking." At the heart of the plan was the construction of 156 large industrial projects, all of them imported from the Soviet Union or from Eastern Europe. Virtually all these projects were built in inland regions or in the Northeast. Thus the beginning of planning in China also meant the beginning of regional distribution and the attempt to move the industrial center of gravity away from the coastal enclaves. The Russian machinery embodied fairly advanced industrial technology, and blueprints and technical specifications were generally provided as well. The Soviet Union provided massive training and technical assistance across the board. Nearly every field was shaped by Soviet advice and training, ranging from architecture and sports training, to industrial engineering, to the organization of scientific research and educational institutions. Some 6,000 Soviet advisers came to China, typically for periods of a year or two; and more than 10,000 Chinese students studied in the USSR. While China paid most of the ordinary costs of supporting advisers, there was a substantial aid component to this assistance, and it would have been extremely difficult for a regime that had no experience with nationwide comprehensive planning to roll out a successful investment plan without assistance.

The initial investment surge of 1953 almost immediately threatened to reignite inflation and was curtailed. Moderate economic conditions prevailed in 1954–1955, and China was still a mixed economy. Household farms dominated agriculture, although the government had already established a monopoly over grain purchases and farmers were being encouraged to join cooperatives. In the cities, private businessmen were allowed to run factories and shops, although most capitalists were being pressured into signing contracts with the state-run wholesalers. But this balance was about to change.

During the second peak of transformation, the "High Tide of Socialism," in 1955–1956, the transformation to public ownership was abruptly pushed through. It began in mid-1955, as Mao Zedong criticized the slow pace at which farmers were joining agricultural cooperatives and accused the officials in charge of rural policy of timidity, likening them to old women "hobbling with bound feet." Mao's criticism touched off a mass campaign to push farmers into producers' cooperatives, a campaign that raged through the winter of 1955–1956. Mao's personal intervention at this time was of crucial importance. The shift of policy led immediately to the organization of virtually all peasants into agricultural cooperatives. At the end of 1954, only 2% of farm households had been enrolled in cooperatives or collectives; by 1955, 14% were enrolled; and by the end of 1956, 98%. Attention then turned to the cities, where during early 1956 private factories and shops were turned into cooperatives or else "joint public-private" factories with substantial control exercised by the state. Private ownership, having survived and grown for six years since the establishment of the PRC, was virtually extinguished during six months in late 1955 and early 1956. Investment growth accelerated to a new peak, as the government pumped resources into the newly established socialist organizations. Two waves of mobilization had produced dramatic social and economic change. The Soviet model was in place, and the year 1956 was thus the first year that China operated a fully "socialist" economy.

3.3.3 Retrenchment: The "Hundred Flowers" of 1956–1957

At the moment when China had just created the key features of the command economy, replicating those that Stalin had created in the Soviet Union, Nikita Khrushchev stood before the 20th Congress of the Soviet Communist Party and on February 25, 1956, denounced Stalin and revealed the crimes of Stalinism. Khrushchev set off global shock waves by declaring that all socialist countries had the right to determine their own path to build socialism. In China, leaders responded by relaxing the political environment while coping with increasingly serious economic problems, caused by the stresses and strains associated with the overly rapid pace of change and industrial growth in 1955–1956. Nearly five million workers had been absorbed into the state sector in 1956, and while about half were urban dwellers previously employed in private businesses, the other half were rural dwellers migrating to the cities. Average wages had grown rapidly, and a flood of new bank credit was extended in rural areas to finance the infant agricultural cooperatives. At the same time, agricultural output stagnated. While rapid collectivization did not cause a dramatic decline in output—as it had in the Soviet Union in the 1930s—the countryside was buffeted by institutional change, and supplies completely failed to keep pace with the increase in demand. Both economic and international political factors were soon pressuring the Chinese leadership to moderate the pace of change.

By mid-1956, Chinese policy pronouncements had swung 180° from those of a year earlier, stressing the importance of careful, gradual change, and criticizing the earlier policy as "reckless advance." In September 1956 the Communist Party convened its Eighth Congress—actually the first such meeting since 1949—which charted a program of economic moderation. Following the Eighth Congress, programs of economic reform were openly discussed that envisioned an economic system with a significant, though subsidiary, role for the market mechanism, and which even contemplated the revival and coexistence of different forms of ownership. This party congress thus touched off a period of liberalism that was later to find echoes in many of the programs advanced after 1978. Economic liberalism spread gradually into the political domain, and by early 1957 party leaders were calling for open political discussion, a movement labeled the "Hundred Flowers." To some, these policies suggested an alternative path to a distinctive Chinese socialism, more moderate and market oriented than the Soviet model. However, the actual outcome of this complex period was far different from what anyone anticipated.

The Hundred Flowers seemed to promise an important new departure for China. Even though the shift to the Hundred Flowers was rooted in the stresses and strains of the overheating of the previous year, it seemed to promise a new era of self-confidence and social flexibility. In fact, such a shift would have made perfect sense, because overall China was looking back at a record of remarkable success. Extraordinarily rapid economic growth had taken place, and industrial production expanded 17% annually between 1952 and 1957. Virtually every sector of the economy was rehabilitated, and the groundwork for sustained future growth was laid by massive investments in education and training. It was a period of rapid social mobility, as farmers moved into the city and young people entered college. It was a period of dramatic progress now looked back upon with nostalgia by many of those in China old enough to remember it. Having accumulated experience in its own economic construction, China now seemed well on the way to defining its own brand of socialism, one that was more flexible and market responsive than the Soviet model. But it was not to be. Within months Mao Zedong had taken the spirit of change so evident in 1957 and turned it in a dramatically new and ominous direction. From unprecedented success, China was about to plunge into unprecedented disaster. The GLF was taking shape.

3.3.4 The Great Leap Forward, 1958–1960

The GLF was the most dramatic, peculiar, and ultimately tragic period in the history of the PRC. The turning point that signaled the emergence of the Leap actually came in mid-1957, when Mao suddenly attacked liberal critics who had spoken out in the Hundred Flowers. Within weeks Mao initiated a broad "Anti-Rightist Campaign" that targeted nonparty intellectuals and anyone with an independent mind. Over the next few months some 800,000 intellectuals and others who had spoken out during the Hundred Flowers period were condemned, removed from their jobs, and, in many cases, sent to labor camps. The political atmosphere changed overnight. When economic-system reforms that decentralized power were finally readied in November 1957, they were implemented in a political atmosphere of renewed radicalism. Mao turned China in a new direction, shifted gears, and accelerated, straight into a brick wall.

The GLF itself was dominated by a highly politicized intoxication with growth that envisaged a bold leap toward a fully communistic society within a few years. The Leap is often seen as the period when China under Mao first developed a vision of socialism that was distinct from the Soviet model. Indeed, widespread enthusiasm for the Leap in its early years was fueled by dissatisfaction with the huge factories and bureaucratic organizations that had been implanted in China as part of the Soviet-style system. But at the same time, the Leap was also a simple intensification of the Big Push strategy. In fact, the most basic economic outcome of the GLF was a massive increase in the rate at which resources were transferred from agriculture to industry. The GLF was the product of a "vision, rather than a plan" (Schurmann 1966, 74), and logical consistency was not always maintained. Indeed, the essence of the GLF was the attempt to resolve contradictions by doing everything simultaneously, regardless of real resource constraints. Nevertheless, there were indeed a number of innovative elements:

1. "Communes" were established in the countryside. A commune was a large-scale (bigger than any collective) combination of governmental and economic functions. It was used to mobilize labor for construction projects, provide social services, and develop rural small-scale industries.
2. Material incentives and monetary rewards were rejected. Bonuses were eliminated in state industry, and free markets in the countryside were shut down.

3. Control over economic decision-making was decentralized.
4. A "walking on two legs" technology policy was established, in which simple technologies (appropriate to a poor nation) were to be combined with advanced industrial technology.

Throughout 1958 the ideological atmosphere became steadily more extreme, and at the same time the leadership began to receive more and more good news about the economy. A spectacular autumn harvest in 1958 comfortably surpassed those of the previous two years. Output of steel increased rapidly. Growth was real, but these reports were also inflated: in the overheated ideological environment, party officials competed to report ever more remarkable successes, with the result that the statistical reporting system became more and more inflated, and ultimately collapsed. The leaders became convinced that unprecedented political mobilization had enabled the Chinese economy to break through the resource constraints that had seemed so overwhelming at the beginning of 1957. Blinded by their own ideological fervor and the breakdown of their statistical "eyes and ears," the top leaders made two fateful decisions. First, they reduced the supply of production resources (labor and even land) available for agriculture, and especially for food production. Second, they increased the procurement of grain, the compulsory deliveries of food to the state. The first decision implied that there would be less food produced in the countryside; the second that the state would take more out.

At first, the impact of these policy measures was obscured by an apparently inexhaustible growth surge. Nearly 30 million new workers were absorbed into the state sector during 1958. In rural China more millions of able-bodied workers were drawn out of agriculture to work in rural factories, including highly publicized "backyard steel mills." Those workers remaining in agriculture were instructed to reduce the acreage sown to grain after the 1958 harvest. Top leaders had allowed themselves to be convinced by crackpot science, which claimed that deep plowing and superdense compact planting of seedlings could double or triple crop yields. This would allow farmers to allocate more land to commercial crops, particularly cotton, needed to feed industry's voracious appetite. Laborers at all levels were pushed to work overtime, seven days a week, in a frenzied attempt to do everything at once. In industry, large- and small-scale factories grew simultaneously ("Walking on two legs"); educational and cultural enterprises expanded almost as rapidly as industrial enterprises. In the communes, new social services, including communal dining halls and child-care facilities, were initiated on a large scale; mass poetry-writing sessions were held. Industrial output targets were repeatedly revised upward, especially the target for steel production. Workers were exhorted to surpass Britain within three years and to catch up with America. In fact, industry grew rapidly. While much of the output was unusable junk, the fundamental problem was not the poor quality of industrial output, but rather the drain of resources and manpower away from agriculture that was entirely unsustainable.

The insanity of the Leap would not have been possible if the party had not silenced critical voices during the Anti-Rightist Campaign or if peasant voices could have been heard warning of disaster. For a brief period it seemed as if the party itself might see the dangers and correct its policies. In the summer of 1959 the party convened a work conference at Lushan to decide on measures to address serious imbalances that were already emerging, including local food shortages. But after several days of discussion, Mao Zedong suddenly seized on the comments of the minister of defense, Peng Dehuai, to launch a bitter attack on the critics of the GLF. A new Anti-Rightist campaign was launched, this time targeting those within the Communist Party and government who had dared to make realistic criticisms of the Leap. Both core policies of GLF were resumed: state-sector employment surged again during 1960, and grain procurement reached new heights. But by this time there were few reserves of food or human energy for the system to draw on. Harvests were declining, and food stocks were being exhausted. As the system careened into 1960, local food shortages were ballooning into regional shortages, and China was facing a massive subsistence crisis.

External factors exacerbated the situation during 1960, but it is clear that the fundamental problem was the willful blindness of China's leaders, beginning with Mao Zedong. Relatively poor weather in 1960 exacerbated the food crisis, but did not cause it. In the summer of 1960, Nikita Khrushchev, alarmed by the increasingly erratic and dangerous tilt to Chinese policy, suddenly recalled all Soviet advisers from China. The move was doubtless intended to pressure China to abandon its profoundly misguided policies, but the result was a permanent rift between the two countries. In 1960 full-blown famine burst upon China. The famine was fundamentally rural, and most severe in inland provinces. Several inland provinces were absolutely devastated. Cumulative excess mortality reached 11% of the population of Sichuan, and nearly 6% of the populations of Guizhou and Anhui (Figure 3.3). Throughout the worst times, the state continued to extract grain from the countryside and supply urban areas, maintaining an appearance of normality in the main coastal cities.

Chinese official population data fully reflect the magnitude. There are different ways to use the data to compute the full extent of the catastrophe, but

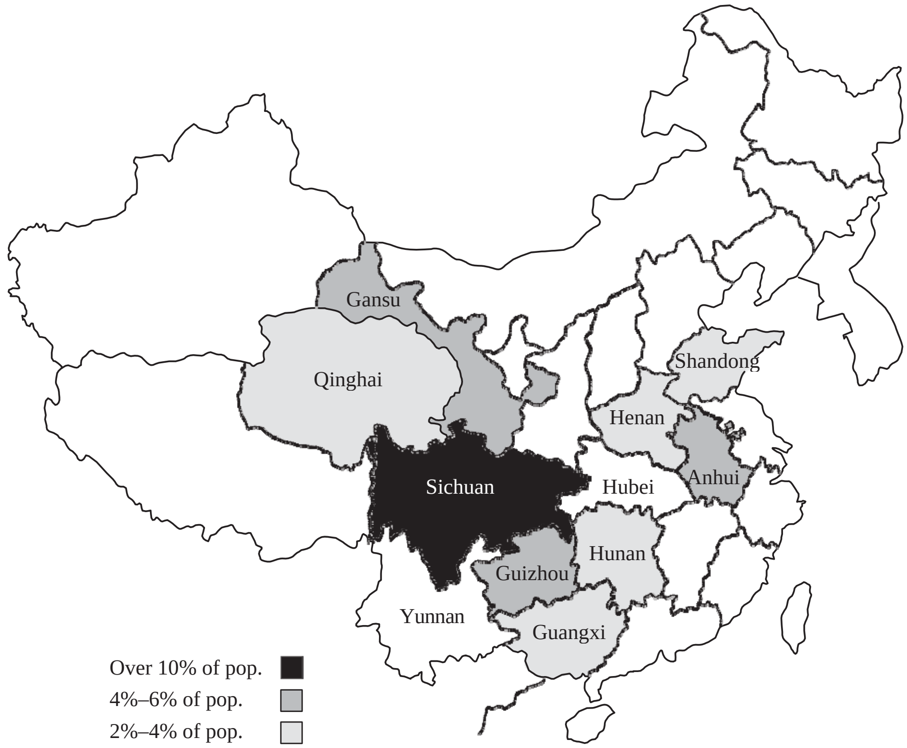

Figure 3.3
The post–GLF famine

they agree that through the end of 1961, about 25–30 million excess deaths occurred due to the great Chinese famine. In addition, another roughly 30 million births were postponed due to malnutrition and shortage. The worst effects of the famine began to recede during 1962, although mortality remained significantly above normal. By the end of 1962 the worst of this immense catastrophe was over. It was the largest famine of the twentieth century, anywhere in the world. Though the catastrophe is acknowledged officially in China, there are no photographs, nor memorials to the dead.

3.3.5 Retrenchment: Crisis and "Readjustment," 1961–1963

Finally, in early 1961, the Chinese leadership recognized the necessity of drastic action. A new set of policies were rammed through at the beginning of the year. Investment was chopped back, and some 20 million workers were sent back to the countryside. Within the rural sector, the communes were drastically restructured, to place responsibility for agricultural production on smaller groups of households. Bonuses and other material incentives in industry were revived. Nationwide, small factories were shut down by the thousands as an attempt was made to concentrate production in a smaller number of relatively efficient plants; rural industry in particular was cut back. Control over the economy was recentralized in an attempt to restore order. Virtually all basic necessities were rationed in an attempt to minimize the impact of shortages. Existing production was reoriented, to the extent possible, to provide greater inputs into agriculture. China, which had been exporting food during the 1950s, entered the world grain market for the first time and became a net importer of food.

Crisis control policies continued and were extended through 1964. Free markets—closed during the Leap—were reopened to provide an additional channel for peasants to supply food to cities and soak up purchasing power. Imports of consumer goods and market liberalization gradually stabilized prices at a new, higher level. During 1963 attention shifted from crisis management to the elaboration of a new set of long-term policies. Initial drafts of a new Five-Year Plan implied a turn away from Big Push policies and an attempt to restore living standards. These policies seemed no more than common sense at the time. Agriculture had been seriously weakened by misguided policies that had destroyed valuable land in an attempt to build water-control projects, build mines and factories, and cut down forests. Living standards in both cities and the countryside had been eroded by shortages and inflation. And China could no longer rely on assistance from the Soviet Union. The new draft plans envisaged rehabilitating existing industrial bases in the coastal regions and concentrating new investment in industries (especially chemical industries) that could support and bypass agriculture by producing fertilizer and chemical fibers.

3.3.6 Launch of the Third Front, 1964–1966: A New Expansion Hijacked by Radicalism

The moderate policies developed between 1961 and 1964 were not continued. Alarmed by China’s isolation in the world and threatened by the increasing American involvement in Vietnam, Mao Zedong shifted China’s development strategy again during 1964. As the worst of the post-Leap crisis ended, Mao pushed for the construction of the “Third Front.” The Third Front was a massive construction program focused on China’s inland provinces (Figure 3.4). The objective was to create an entire industrial base that would provide China with strategic independence. By building factories in remote and mountainous interior regions, Mao hoped to ensure that China’s industrial base would not be vulnerable to American or Soviet military pressure. Beginning

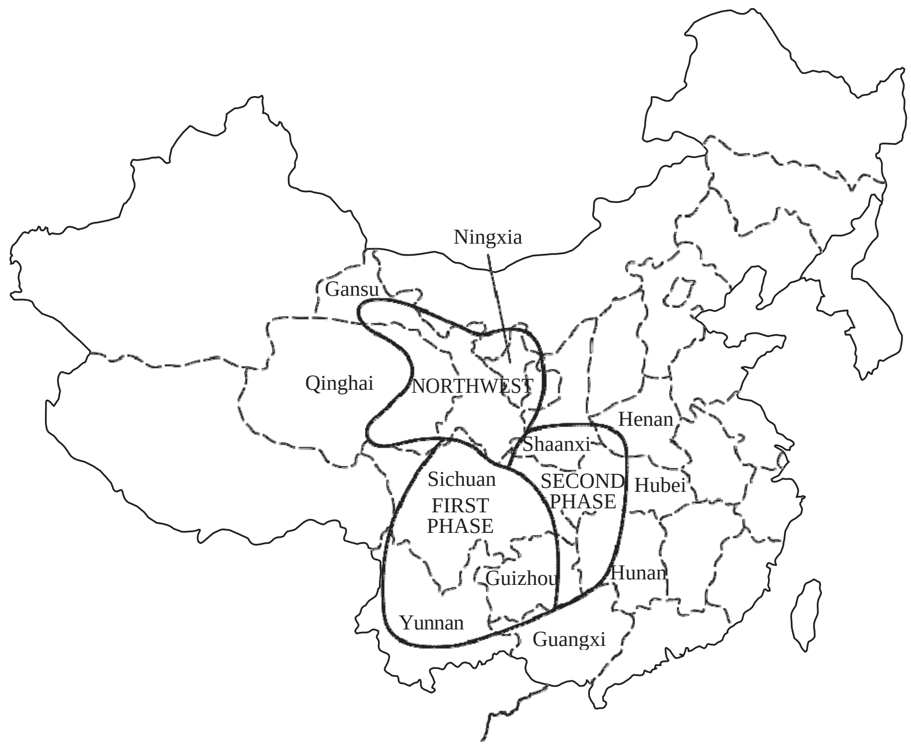

Figure 3.4
The Third Front, 1964–1975

in late 1964 a new "high tide" of production was begun that focused on the construction of factories and railroad lines in China's southwestern provinces, particularly Sichuan and Guizhou. With this program the Big Push strategy was firmly reestablished as the basis of China's development policy, this time with a militarized and regionally redistributive cast. During 1965 and 1966 investment and industrial production surged as the first stages of inland construction were completed. The Third Front dominated economic construction from late 1964 onward. However, the rapid expansion of which it was a part was brought to an abrupt halt by the eruption of the Cultural Revolution.

3.3.7 Retrenchment: The Cultural Revolution, 1967–1969

In August 1966, Mao launched the so-called Cultural Revolution. The Cultural Revolution has many definitions and even more explanations. The term "Cultural Revolution Era" is often used in China to refer to the entire 10-year period between 1966 and Mao's death in 1976, a usage in which it becomes synonymous with an entire era dominated by a particular kind of leftist political rhetoric. A more accurate approach, however, is to use the term to describe a shorter period of political disruption and unrest that lasted between 1966 and 1969. During this period, Mao encouraged groups of students, called Red Guards, to overthrow the entrenched Communist Party leadership, except for Mao himself. The Communist leaders of China, including Deng Xiaoping, were suddenly subject to criticism, dismissal, and sometimes worse, at the hands of gangs of students and "revolutionary workers." The Cultural Revolution is far too complex and peculiar a phenomenon to be dealt with here: it is usually seen either as an attempt by Mao to use young people to revive the revolutionary spirit and cleanse China of bureaucratic tendencies, or else as a Machiavellian plot by Mao to purge his own opponents in the power structure. In either case, the result was substantial disruption and a gradual descent into unrestrained factional conflict.

From an economic standpoint, the Cultural Revolution (in the narrower definition) was, surprisingly, not a particularly important event. The Cultural Revolution produced a lot of dramatic new political imagery but had relatively little effect on the economy. This result clearly occurred because of the unusual coincidence between a phase of radical politics and a phase of economic retrenchment. In contrast to the GLF, the disruption of the Cultural Revolution was "managed" quite effectively: investment was curtailed in a relatively orderly fashion; agricultural production was only slightly affected; and while industrial production declined, the fall was moderate, and production of vital necessities and priority projects continued. The guiding economic policies before the Cultural Revolution were quickly reinstated after the worst disruption was over, beginning in 1969. As in 1965–1966, the focus of economic construction continued to be the Third Front. One difference was that by 1969 the threat from the United States in Southeast Asia was deemed to have decreased, while relations between China and the Soviet Union had continued to deteriorate and had reached the point of open military clashes at disputed points on the border and ominous Soviet saber rattling.

3.3.8 The Maoist Model: A New Leap in 1970

Between 1969 and 1971, as China emerged from the "narrow" Cultural Revolution, a new "leap forward," focused on the Third Front, unfolded. This time there was no massive diversion of resources from agriculture, but investment surged and consumption was restrained as all efforts went to industrial construction. During this period China was operating under something approaching martial law. The army had been called in to quell the factional fighting into which the Cultural Revolution had deteriorated, and the direct involvement of the army in civil affairs was now reinforced by the perception of a military threat from the Soviet Union. Along with militarization of society came a systematic attempt to revive some of the ideals of the GLF. Once again, material incentives were criticized and bonuses eliminated; once again, control over economic decision-making was decentralized; once again, an attempt was made to develop rural and urban industry simultaneously. The difference from the Leap was that austerity was built into the program from the beginning. Rather than trying to do everything simultaneously, the Chinese people were urged to tighten their belts and give everything for construction. For a while these policies seemed to bear fruit, and production quickly surpassed pre–Cultural Revolution peaks.

In what way was this Maoist model a distinctive variant of the overall Soviet system? We can identify five elements:

1. Pervasive militarization of the economy. Priority was given to the national defense–related investment program of the Third Front. In addition, the People's Liberation Army had been called in to resolve Cultural Revolution factionalism. As a result, uniformed army officers were often managing production facilities. Austerity was encouraged.

2. Decentralized operation of the economy. Rural industries were encouraged, particularly the "Five Small Industries" that directly served agriculture (see Chapter 10).

3. Relative autarky was practiced. Economic links with the outside world were minimized, and regions within China were expected to achieve as much self-sufficiency as possible.

4. There was an almost complete absence of material incentives (bonuses or piece rates). There were few markets of any kind for farmers, and no market for grain.

5. Market-driven labor mobility virtually ceased. Urban school-leavers were sent to the countryside, and the government directed manpower and resources to remote inland areas, but migration and urbanization halted.

3.3.9 Retrenchment: Consolidation and Drift, 1972–1976

During 1971 economic problems began to emerge once again. In spite of the general mood of austerity, industrial growth was once again outpacing agricultural growth by too wide a margin. The steadily swelling ranks of industrial workers were putting pressure on the food supply. In the decentralized and generally disorganized process of investment, too many new projects had been started that could not be expected to begin producing for many years. An increasingly large amount of manpower and other resources was being tied up in construction, while the output necessary to support these people and projects was not forthcoming. Economic pressures were suddenly reinforced by dramatic political events. In late 1971, Lin Biao, a key Cultural Revolution leader and the head of the military, was suddenly purged, and almost immediately thereafter a rapprochement was engineered between China and the United States, marked by the visit to China of President Richard M. Nixon in 1972. With the sudden relaxation of the international environment and the purge of China's most powerful military figure, the leadership was in a position to address the emerging economic problems.

The premier, Zhou Enlai, took the lead in introducing a new, more moderate course. Investment was cut back, and the priority given to the Third Front was dramatically reduced. Some investment was shifted to coastal regions where it could be completed more efficiently. Economic relations with the capitalist world were reestablished, and a decision was made to spend US$4.3 billion to import industrial equipment. One of the largest items was a set of 11 very-large-scale fertilizer plants from a U.S.–Dutch consortium. During 1972–1973 a major restructuring of Chinese economic policy in a more moderate direction was emerging. As Zhou Enlai's health deteriorated, Mao brought the moderate Deng Xiaoping, a prominent victim of the Cultural Revolution, back to power at the end of 1974. During 1975, Deng presided over a "rectification" of policy, trying to overcome some of the worst of the Cultural Revolution problems, but these dizzying political changes would not cease, and Deng was again ejected from power in 1976.

Political struggles prevented a thorough reorientation of Chinese policy. Figure 3.2 shows the annual pattern of fluctuating investment: It was impossible to get follow-through on any systematic economic policy. The aging Mao refused to allow any criticism of policies associated with the Cultural Revolution and encouraged a group of radicals (subsequently dubbed the "Gang of Four") to obstruct trends toward economic rationalization. While the radicals succeeded in radicalizing culture and ideology, they never had control of economic policy-making. Nevertheless, their political power led to a period of deadlock in the top leadership, which increasingly turned into an open power struggle as it became clear that the succession to Mao was near. Between 1974 and 1976 economic policy-making was paralyzed.

3.3.10 The Leap Outward: 1978 and the End of Maoism

This deadlock was finally broken by the death of Mao Zedong in September 1976. Within days a new leadership threw the Gang of Four in prison and quickly turned its attention to economic matters. Through 1977, conscious of the chaos that had come to dominate economic administration, the post-Mao leadership concentrated on a series of rectification and data-collection exercises. Investment was maintained at modest levels while a program of moderate recentralization was carried out. Systematic rehabilitation of key sectors such as railroads was carried out. While rehabilitating the economy, the leadership was making big plans. The new leader, Hua Guofeng, staked his prestige on a massive investment push, framed as a 10-year plan for the 1975–1985 period. This plan envisaged the creation of 120 major projects, all large in scale and most in heavy industry. Ten huge integrated steel mills were envisioned, as well as 10 new oil fields, 30 large power plants, and 5 new ports. Lying behind this grandiose plan was a belief that the Chinese economy was capable of rapid growth: If only China could purge leftist politicians, focus attention on economics, and rebuild economic institutions, it could experience a major economic takeoff.

Yet it was not to be, for China was not yet ready for economic acceleration. The plan was based on faulty calculations. Between the early 1960s and 1977, China's petroleum production had grown by 15% annually, and the 10-Year Plan was based on the idea that China would export pay for high-quality industrial capital goods embodying the latest Western technology by exporting oil: for this reason it was dubbed in Chinese a "great leap outward." Given the decimation of the planning apparatus during the Cultural Revolution years, planners were in no position to address the difficult problems of absorption of new technologies and massive resource flows, selection of sites and detailed project planning, and coordination of multiple new projects. Instead, the "leap outward" collapsed of its own weight, for two reasons. First, as political enthusiasm spread, investment plans kept being raised, just as they had been in the GLF, 20 years earlier. Given permission to import foreign technology, numerous Chinese agencies scrambled to sign contracts with foreign suppliers. By late 1978 China was negotiating on at least US$40 billion worth of projects, and about US$7 billion worth of contracts were actually signed. This would have been a massive commitment for an economy only barely open to the outside world. Second, China's effort to expand oil production and export ran into unexpected obstacles. In fact, all along half of China's oil production had come from the one field, Daqing in the Northeast, which was showing signs of depletion. During 1977 and 1978, China drilled nearly 15 million meters of new oil wells (which would have cost several billion dollars in the West) and struck oil only once, at a remote site in Xinjiang. It became clear that China did not have the oil to pay for these expensive contracts. The entire leap-outward strategy collapsed, as it became apparent to all that it was infeasible.

3.3.11 A Final Turning Point: The Third Plenum and the Beginning of Economic Reform

Finally, at the end of 1978, political factors came together in a way that allowed a fundamental departure from the economic and other policies of the Cultural Revolution era. The December 1978 "Third Plenum" initiated a new era in the Chinese economy and in Chinese politics. The third "plenum" (i.e., meeting of all members) of the 11th Central Committee marked an unmistakable break with the past. Politically, the plenum marked the return of Deng Xiaoping to the position of paramount leader, in alliance with other veteran CCP leaders, such as Chen Yun and Li Xiannian. Ideologically, the way was opened to free discussion of a number of previously taboo topics. In the economic realm, a host of new policies were adopted. From 1979 onward, the discussion of specific economic policies belongs with the contemporary period of economic reform (Chapter 4), rather than with the legacies of the command economy.

3.4 LEGACIES OF THE SOCIALIST PERIOD

3.4.1 The Legacy of Policy Instability

The details of the political conflicts that repeatedly split Maoist China are exhausting, sometimes bewildering, and ultimately dispiriting. By the end, the aged Mao was an enormous obstacle to China's development, confusing his own personal power and self-justifications with China's realities and needs. Yet from the economic standpoint, a rather simple picture emerges. Here was a system that set all the strategic and systemic settings to maximize the flow of resources into industrialization. It concentrated discretionary power at the top, so that leaders could throw resources at whatever their priorities were. The system, in other words, was set up to maximize the potential to "leap." But every time the system really began to accelerate, it ran into fundamental problems. The economy would overshoot and hit its head on the ceiling. What was this "ceiling"? The ceiling was the inability of agriculture to rapidly generate adequate food surpluses, combined with the weak capacity of the system to generate productive employment for its abundant labor.

This legacy had some important consequences after 1978. First, it generated profound dissatisfaction with the standard socialist system, even among

CCP leaders. While there was no fundamental rejection of the socialist system in the late 1970s, there was a remarkably deep willingness to experiment and revise, founded on deep misgivings about the socialist system. Second, the sharp political divisions meant that CCP leaders could disassociate themselves from the failures of the past by blaming mistakes on Mao, who, after all, richly deserved the blame. Finally, China's leaders could find in the past, in periods of experimentation or economic recovery, policy models that might be appropriate in an era of economic transition. The most significant sources of inspiration were the 1956–1957 Hundred Flowers, at least the economic-policy components, and the agricultural-policy experiments in the early 1960s, immediately after the GLF famine. Indeed, the policy of contracting farm output to households, which was the critical reform breakthrough in the early 1980s, actually had its roots in Anhui Province in 1962–1963. Even the decentralization of the early 1970s had some demonstration value to reformers in the 1980s. Finally, reformers at the end of the 1970s had learned how deep-rooted the problems of the planned economy were, and they were aware of potential alternatives.

3.4.2 The Shortcomings of the Development Strategy

There were a number of adverse factors associated with the socialist development strategy. First, the single-minded pursuit of industrial development meant that consumption was neglected. During the entire 1952 through 1978 period, gross capital formation grew at an average annual rate of 10.4%, and it was 13 times as large in 1978 as in 1952; but household consumption grew at only a 4.3% rate and was triple the 1952 level by 1978. After allowing for population growth, per capita household consumption grew only 2.3% annually, by official statistics, which somewhat overstate real growth. Moreover, the urban–rural differential was significant: urban growth at 3% was significantly above rural growth of 1.8%. Thus by 1978 per capita consumption in urban areas had slightly more than doubled, but rural per capita consumption was only 58% higher than in 1952. Consumption growth of this magnitude would be perceptible, but slow, and certainly not exceptional by comparative standards.

Growth in services was neglected. Normally, as an economy develops, agriculture shrinks in relative importance while industry and services expand (this relationship is discussed in more detail in Chapter 6). However, this generalization was not true for China between 1952 and 1978. Services actually *declined* from 29% of GDP to 24% of GDP over this period, mostly because of a declining contribution from commerce. The government was hostile toward the marketplace and independent businessmen: In 1952 there was one retail salesperson for 81 people, but by 1978 there was one for 214 people. There was one restaurant for every 676 people in 1952, but only one for 8,189 people in 1978. Social services like science, education, and health altogether increased their share of GDP, but by less than one percentage point.

The relative shrinkage of the retail sector reflected the fact that there was no real competition on consumer markets, and there was thus little quality improvement and few new products introduced. Moreover, pricing policy further discriminated against consumption. Any consumer good that could vaguely be considered a “luxury” was priced with a high markup, satisfying egalitarian impulses and also conveniently soaking up excess purchasing power. Such goods—including relatively mundane items such as wristwatches and electric fans—were often not affordable by average households, even when available. Indeed, even given slow income growth and high prices for luxuries, rationing was imposed to limit demand and distribute goods in scarce supply. From 1955 until well into the 1980s, ration coupons were required for the purchase of grain and cotton cloth. While the scope of rationing fluctuated with the degree of shortage, as of 1978 there were some kinds of ration restrictions in place for more than 20 items, including, besides grain and cloth, such items as soap, tofu, and good-quality bicycles. The degree of shortage of basic consumer goods was much greater than in the Soviet Union, which abolished most rationing after World War II.

A second major shortcoming of the development strategy was that employment creation was relatively slow. Because most industry was capital-intensive and services were neglected, new labor requirements were modest. Between 1952 and 1978 the total labor force grew by 191 million (from 207 to 398 million), but growth of the modern industrial and service sectors only absorbed 37% of the *increase* in the labor force! The agricultural workforce grew by 2% per year over the entire period. By 1978 the agricultural labor force was 70% larger than it had been in 1952, notwithstanding a virtually zero increase in cultivated land and rapid ongoing industrialization. As a result, underemployment, particularly in rural areas, remained a serious problem.

Third, much of the industrial investment was not only capital-intensive, but also relatively demanding technologically. Plants were often large, complex, multistage commitments that took years, even decades, to construct and put in operation. This fact had immediate implications: the economic return was often low, in the sense that capital was tied up for many years without producing output. Indeed, there were numerous cases of Chinese factories that never fully ramped up mass production of complex processes, steel mills, for example, that encountered problems with difficult ores and complex processes.

Perhaps as a result, the industrial growth rate showed a tendency to decelerate: growth was highest during the 1950s (17% per year between 1952 and 1957) and slowed to 8% per year during the 1970 to 1979 period. In a sense, Chinese industrialization strategy was overambitious. By concentrating on capital- and technology-intensive heavy industries and neglecting labor-intensive consumer goods industries, the Chinese were pouring scarce resources into difficult undertakings while ignoring opportunities to exploit relatively "easy" projects. The strategy created an important heavy industrial base, but those assets were being used at very low efficiency.

3.4.3 Human Capital Base

One area where it is possible to have a positive appraisal of China's socialist policies is the investment in basic human capital. The flow of resources into basic health and education was fairly substantial throughout the socialist period, and Chinese people were healthier and better educated at the end of the Socialist era. While individual consumption growth was restrained, "socialized" consumption such as education and health grew rapidly. Moreover, these outlays were often made in ways that benefited lower-income members of society. Thus, even though the Cultural Revolution shut down the university system for years, primary education spread significantly during the same period, and illiteracy declined rapidly. Strong entry-level health care institutions in the countryside were built up during the same period. The result was that life expectancy at birth climbed to 60 for the overall period 1964–1982, according to our best estimates. This was quite high for a country at China's income level, and up from about 50 in 1957 and perhaps as low as 30 in the early years of the twentieth century (Banister and Hill 2004). According to the 1982 census, two-thirds of the population was literate, again a fairly good comparative performance. Basic industrial skills were widespread in the population.

One is tempted to claim that the socialist system did a fairly good job of providing for basic needs and putting a subsistence floor under its poorest citizens. The problem is that the terrible famine of 1959–1961 makes a mockery of this statement. What good does it do to provide for your citizens basic needs for 27 years if you force on them policies of starvation in the other three years? In effect, the irrationalities of the system were so profound that they destroyed what could and should have been its proudest achievement. After December 1978, Chinese leaders struggled to transform a system that they themselves had built over the preceding 30 years. As a result of the twists and turns of the preceding decades, the system they confronted was more decentralized, more contested, and less entrenched than that of the Soviet Union. Chinese leaders perceived more options and flexibility, and they were determined not to be left behind by their dynamic East Asian neighbors.

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Sources for Data and Figures

Figure 3.1: NBS (1999, 6–7); *SYC* (various years).

Figure 3.2: NBS (1999, 6–7); *SYC* (various years).

Figure 3.3: Lin and Yang (2000); NBS (1999).

Figure 3.4: Naughton (1988).

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