



Philip Scranton

Enterprise, Organization, and Technology in China

A Socialist Experiment,
1950–1971

palgrave
macmillan

Enterprise, Organization, and Technology in China

“Philip Scranton, the leading U.S. business historian of the last three decades, has once more reimagined business history. His new book, *Enterprise, Organization, and Technology in China*, finds a remarkable story of business enterprise where few have thought to look for one before: in the People’s Republic of China. Based in meticulous and wide-ranging research, Scranton uncovers a fascinating panorama of coping, adaptation, learning, and growing success amongst Chinese enterprises in the period from the revolution to the early 1970s. The Chinese economic miracle of the late twentieth-century is often closely associated with the launch of open markets reforms in 1978. But as we learn here, the preceding decades were no less important. Facing often-daunting constraints, Chinese enterprise managers and employees deployed resilience and ingenuity to build increasingly-firm business networks across infrastructure, commerce, industry and agriculture. This new book displays all the hallmarks we have come to expect in Scranton’s work: deep research, ever-insightful analyses, clear organization, and elegant writing. It is destined to become both a standard reference on enterprise in Communist China and a classic of business history.”

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Cambridge University Press

“In their 2013 book, *Reimagining Business History*, Philip Scranton and Patrick Fridenson challenged historians to go beyond well-trodden boundaries of Europe and the United States. Now, in *Enterprise, Organization, and Technology in China*, Scranton has taken up his own dare, giving us a path-breaking examination of 21 years of business history in the People’s Republic—a place where many assume there were no enterprises. Scranton uncovers many of the phenomena that you would expect to find in state communism—material shortages, falsified reports, and innumerable injustices and irrationalities. But his real theme is a different one, something that he has shown again and again throughout his career: that humans have organized their labors in a vast and dizzying array of ways, that the real surprise is how much we manage to get done.”

—Lee Vinsel, *History of Technology*, *Virginia Tech*, USA

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Preface

The other day at our morning coffee group, my writer friend Abby asked what the book I've been working on was about. "Communist business," I said. "There's no such thing as Communist business. That's a contradiction in terms," she said. So that's where we start.

Few of this study's readers will have had experience with enterprises operating on the basis of socialist economic principles (or trying to do so). That's why the stories ahead may seem peculiar in multiple ways. That's good, though, because seeing them as "peculiar" reflects our shared experiences with capitalist businesses, differently encountered by each of us, of course, but pervasive. Contrasts with "Communist China" will pop up repeatedly—"The past is a foreign country. They do things differently there."¹ Indeed, they did, but in the People's Republic, businesses also did many of the same things as in the capitalist West—made and sold goods, provided services, paid workers, kept accounts, bought machinery, and so forth. As you encounter these common threads, please also take note of the differences—cooperation, collaboration, emulation campaigns, planning exercises, work stoppages for problem-solving meetings, and much more. Then consider what difference these differences made (and make) to doing business, then, now, and perhaps in the future. I wrote these chapters to share enterprise stories in the Maoist decades, not to tell you what they mean or to point out comparisons to the West. That's up to you, if you're interested.

Second, the opening half of this book documents processes through which market-centered firms and farms were gradually absorbed into the project of building socialism and replaced by different organizations. This was a mistake-filled, even erratic trajectory, featuring many small failures and several

big disasters. Chinese managers, planners, engineers, and workers appreciated this and often wrote about it, creating many of the sources I cite. The second half of the book shows ways in which these actors strove to consolidate the first decade's gains and avoid repeating its errors. That too was hardly a smooth pathway. Yet by the early 1970s, the PRC had solidified a socialist production system balancing agricultural and industrial development and had created network infrastructures either absent in 1949 or in ruins. I believe that the organizational and technological experiments you will encounter had a great deal to do with this outcome. Perhaps at the book's close, you will agree. But whether or not, I do hope you'll find that "Communist business" was a project in motion, not a contradiction in terms.

Oak Bluffs, MA, USA
July 2018

Philip Scranton

Note

1. L. P. Hartley, *The Go-Between*, (New York: NYRB, 2002 [reprint of 1954 ed.]), 17.

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research reports that form this study's archival backbone. For the record, no grants from individuals, foundations, universities, or government units were received to support preparation of *Enterprise, Technology and Organization in China: A Socialist Experiment*.

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1

Introduction

In China, a transformation is taking place unlike any other in modern history. The success or failure of the experiment, carried out under the strict supervision of the Communist Party, which has been in power since 1949, would seem to be of direct significance to one quarter of the world's population... [I]t represents an attempt to transform an overpopulated, underdeveloped agrarian society into the [world's] third largest industrial power in a very short time and with a minimum of help.—*Ost Europa Wirtschaft*, 1962¹

Two items at the start. First, experimentation at grand and minuscule levels has characterized state and enterprise practice from the outset of the People's Republic of China; and second, as the Maoist era has been eclipsed and condemned, overlooking experimentation's continuity from the 1950s has become customary. In 1967, adding context to *Ost Europa's* assessment, a Polish journalist noted that “[t]he Soviet experts who worked in China until 1960 took a dim view of the enormous waste resulting from a multiplicity of abortive experiments and trials.”² Still, experimentation continued. Historian Lynn White III summarized the Great Leap Forward as “a gigantic administrative experiment.”³ However, more recently, the first PRC generation's devotion to trials and tests has become obscured; a recent study, *China Experiments*, focused only on later decades: “Local experiments are the hallmark of how China has undertaken all sorts of reforms since the end of the Mao era in 1978.”⁴ Not so fast. If anything, Deng-era experimentation represented continuity with practices dating to the early post-Liberation years—from the outset, the PRC was “a socialist experiment.”

Researching this book after studying enterprises in Communist Central Europe brought many surprises, but none so vivid as encountering in the People's Republic of China extensive support for problem-solving through experiments, investigations, tests, prototyping, trial production, and knowledge-sharing. Enthusiasm for the novel and the ready acceptance of failure, its corollary, rarely animated firms and managers in Poland, Hungary, or Czechoslovakia. Reasons for this difference are scattered through the stories related below, but they likely include the enormous tasks of socialist construction in a huge, poor domain that was hardly a nation (Just try something, anything!), Chairman Mao's emphasis on research as a key path to knowledge,⁵ and the relatively swift apprehension that rote application of Soviet models caused confusion and conflicted with revolutionary values.

Several related questions surfaced while preparing this monograph. How did Communist China's enterprises *do* business? How did the People's Republic manage to construct socialism and pursue industrialization with (next to) no money? What was socialist about socialist agriculture, construction, commerce, and industry? How were investment, technology, or marketing decisions made and implemented? How did enterprise routines form and change in the PRC's first generation? How could huge deficits in workforce literacy and skills, management experience, and engineering capacity be addressed? How could a balance between expertise and revolutionary values be maintained in workplaces and business relations? How did relationships unfold and alter between center and province, policy and practice, cadre/manager and farmer/worker? What can we discover about what happened inside enterprises in this massive, ragged, and ever-incomplete socialist experiment? Finally, what might entrepreneurs and managers in the capitalist world, endeavoring to deal with twenty-first-century China, learn from a collection of stories from the first phases of a world power's trial-and-error construction? Attempting to answer all but the last is the task ahead.

At the outset, it should be remembered that postwar China faced far greater challenges in building socialism than Europeans did.⁶ In the 1930s, Poland, Hungary, and Czechoslovakia all possessed broadly modern infrastructures, sizable industrial capacities, effective if not efficient bureaucracies, and functioning agricultural, extractive, and educational systems. Though in the postwar each sector had to meet the demands of Stalinist planning, all three states had the core capabilities to remedy wartime damage, including widespread literacy, organizational experience, and a critical mass of technicians and skilled workers in manufacturing, construction, and transport. China had few of these assets in 1949, emerging from decades of war that

shattered most administrative and business operations. Even Poland was far less dependent on farming than China; it *restored* transport links, rather than creating them *de novo*. At base, the People's Republic needed simultaneously to fabricate a modern economy and a modern state—each an immense task—yet had sparse resources for either. These “start conditions” help account for the decades-long oscillation between politics and performance regarding enterprises, markets, investments, and construction. Learning on the job, Chinese officials undertook multiple “experiments” to test organizational structures and practical methods for fostering economic growth. Unsurprisingly, these steps generated uneven outcomes and conflicts among those promoting rival approaches. Policy implementation triggered a cyclical routine of sectoral growth and institutional development, unwound by policy reversals, setbacks, and recriminations, before support renewed for fresh experiments that could restore “socialist progress.”⁷ Moreover, as Audrey Donnithorne has shown, *implementation* often included *interpretation* at the provincial, city or county level, leading to quite a diversity of practices.⁸

Clearly by 1950, although both China and Central Europe had communist state structures and a socialist-transition economy, most everything else was sharply different. China's *scale* was staggering; Guangdong province alone is as big as Poland geographically and held 40 million people by 1960 (Poland, 30M); while some 600 million more resided in other PRC provinces and regions. Although New China's economy remained massively devoted to agriculture, many farmers continued struggling with poverty well after Communist land redistributions. China had also endured at least three major twentieth-century famines before a fourth erupted during the Great Leap—disasters absent from twentieth-century Central Europe (except in wartime). Parts of China also were weak prospects for growth—most of the West and Southwest, Inner Mongolia, and mountainous districts in the center—whereas population, usable farmland, and urban centers crowded into a broad eastern corridor stretching over 3300 km. from Harbin in the north to Guangzhou in the south. Moreover, China's technological weaknesses presented lasting obstacles. Agricultural tools remained traditional in the 1940s/1950s, used in hard hand labor. This changed very slowly. The country's variegated climate/soil/water conditions (and farmers' settled cultural ways) made introducing “modern” tractors, farm equipment and chemical fertilizers a complex task. So was producing them. Standardizing, maintaining, and repairing agricultural technologies proved elusive for years. Given this, moving ahead depended on agriculture.

These key issues (agriculture's centrality, persistent poverty, and technological traditionalism) generated long-term problems for the state,

enterprises, and managers, especially in acquiring and distributing food for a population increasing an estimated 15 million yearly. National and provincial officials faced tough resource allocations among industry, construction, defense, education, and agriculture.⁹ These difficulties intersected with a politically unsettling dependence on foreigners for technological inputs (first, the Soviets, then after 1960, a mix of Japanese, British, French, German, and Central European partners). Importing machinery necessitated exports [foods, handicrafts, materials] to secure hard currencies for payments, a “contradiction” that reinforced the significance of organizational experiments and drives for technical self-reliance.

Three other constraints were almost as important, though each had some positive aspects. First, postwar China had a fragmentary and incomplete *infrastructure* of railroads, roads, bridges, dams, waterways, electricity, and communications, portions of which had been neglected, damaged, or destroyed. The upside here, however, was that every region had vital candidates for capital construction projects. Second, China experienced repeated cycles of *natural disasters*: droughts, severe storms (typhoons, monsoons), floods, pest invasions, and earthquakes that repeatedly wrecked programs to provide irrigation, store and distribute water, improve crop yields, and enhance rural living standards.¹⁰ A combination of disasters, plus the withdrawal of Soviet technicians, and an overly ambitious Great Leap policy reducing food-raising land and farm-working time generated China’s last famine.¹¹ The modest positive aspect of these catastrophes was that for decades, repairing and expanding facilities to contain and direct waterflows or rebuilding or maintaining road and rail transport, provided work and (usually) income for millions of citizens, particularly in months with low farm labor demands.¹²

Third, after several centuries of foreign interference and manipulation, PRC leaders and citizens alike had a deep aversion to outside interference, sharply reinforced when during the 1960 Sino-Soviet break, departing Soviet engineers abandoned hundreds of major projects. Pride in all things Chinese animated cadres and citizens while the center prioritized *self-reliance* and self-sufficiency in economic and military affairs. This isolated the PRC from external financial, technical, and scientific dynamics,¹³ impeding growth along Western lines. Yet it also protected China from a backdoor subversion of socialism through accumulating debt to capitalist institutions, agencies, and enterprises, something that plagued Central Europe once the 1970s oil crises struck.

These constraints sustained a long-standing shortage of investment capital and human resources for development, despite an urgency to overtake others

in the socialist camp and to defend China against multiple enemies. Still, by 1970, industry had deepened, infrastructures solidified, and rural yields (and living standards) made modest gains, even though the Great Leap Forward's failure blunted the first Liberation decade's promise. Between 1958 and 1971, economic policies that lurched from decentralization to centralization and back destabilized agricultural and industrial enterprises, displacing or disempowering managers before the Cultural Revolution demonized traders, experts, and planners. Yet by 1970–1971, the red tide's impact on the economy had ebbed. It indeed disrupted capital construction somewhat, but “barely touched the agricultural sector.” Ironically, by wrecking party and ministry control mechanisms, it also boosted rural and urban “private [business] activity.” Once-vilified planners quietly returned to their offices to outline the Fourth Five Year Plan (1971–1975), which Zhou Enlai announced just before National Day, 1 October 1970.¹⁴

It is in these overlapping contexts that enterprises devised and revised business practices, improvising and experimenting with socialist organizational forms, routines and market relationships, frequently responding to reform or uplift campaigns launched from Beijing.¹⁵ This recurrent willingness to try novel approaches at the commune, town or county level sparked far more creativity in matching resources to needs than Central European socialisms developed. Emulation, long a Chinese value, persisted.¹⁶ The try-outs, prototypes, or test practices that enterprises and state actors judged promising could be repeated on provincial or regional stages, with failures critiqued as learning opportunities. Crucial to such efforts, sometimes propulsive, sometimes resistant, were officials known as *cadres*, Party members who had made “a commitment to a cause, the cause of communist revolution.”¹⁷ Cadres could occupy organizational niches parallel to line managers and section heads, emphasizing the political “mass line,” but also served directly as managers, staff, researchers, and workers, leading to creative or frustrating overlaps in responsibilities. Here it is useful to remember that cadres were expected to exemplify and sustain revolutionary values, whether in steel mills or in rural work teams (Fig. 1.1).

What follows explores and analyzes both mundane and innovative practices in four enterprise domains: agriculture, infrastructure, commerce, and industry, across two periods, 1950–1961 (from Liberation to the Great Leap's collapse) and 1962–1971 (from recovery to the Cultural Revolution's economic eclipse). The sequencing of sectors follows from the interactive performance of China's economy. Agriculture was the foundation for national survival, whereas constructing infrastructure reflexively proved essential to providing water and power, defending against floods,

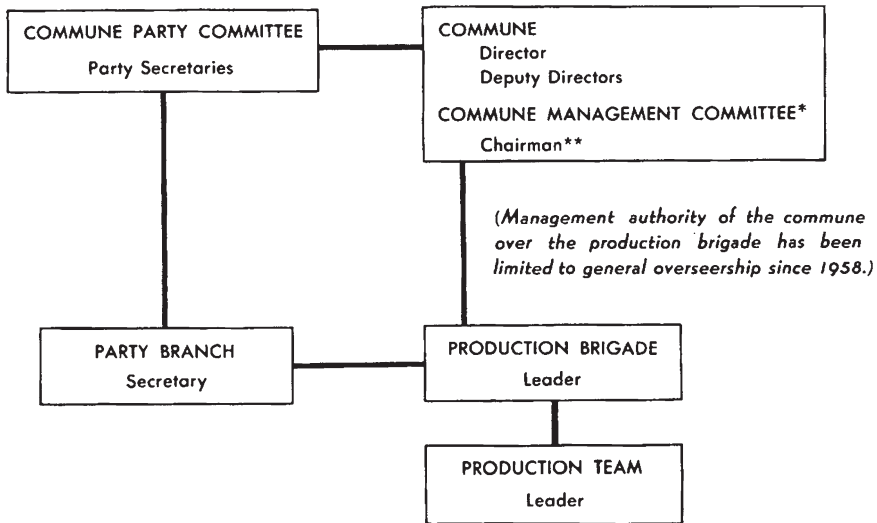


Fig. 1.1 Organizational chart for communes, with Political Cadres on left, parallel to Line Managers on right (Source CIA, "Economic Aspects of Communist China's Communes, 1959–1960," 21 October 1960 [Secret, declassified 12 August 2013, CIA-RDP79R01141A001700150001-5])

and transporting commodities to processors and manufactured goods back to rural districts. Commerce handled transactions for agriculture, manufacturing and construction enterprises, whereas industry in part depended on agricultural outputs—food for workers and materials for processing.¹⁸ Manufacturing proved crucial to the PRC's emergence on the world stage, but often developed in ways state planners and political leaders had not expected. Next, some remarks on why this book exists and what it aims to accomplish.

1.1 Discipline and Purpose

In 2013, Patrick Fridenson and I published *Reimagining Business History*, a set of reflections on the state and prospect of our shared discipline. In reviewing it, Robin Holt neatly captured our intention to question "the prevailing assumption that a tiny, neat narrative portraying a linear progression of argument carries more authority than looser, fragmentary stories. Whence this despotic demand that history is a process of tidying up rather than delighting in the random piles of sweepings we might encounter through inquiry?" This study provides scores of such "looser, fragmentary stories,"

intended to evoke readers' delight and surprise at the "strangeness" of Mao-era enterprises, when viewed through capitalist lenses, while striving to appreciate and respect PRC actors constructing socialism as knowledgeable agents, not political or cultural ciphers. Like all of us, they frequently didn't understand what their actions would lead to or fully comprehended contexts and opportunities, but, also like us, they learned situationally and reflexively, refining their practices over time. Essentially, this monograph is a pragmatic, empirical descendant of the *Reimagining* project and of the sensibilities that informed it. Holt summarized them thus:

[F]orms of evidential substance and arresting argument matter profoundly... Arguments, though, are to be built through relations in tone and color as much as they are [in] neat outline, and what is being made present can carry enigma without guilt. The disciplining force for such historical knowledge production falls to imagination... In such a setting, knowledge production becomes something more than exposing the world as it is. It becomes creative, and serves both as a balm and a source of further provocation, allaying uncertainties and just as readily upending long held commitments. This is the paradox of knowledge, it begs a solution yet always proffers alternatives; by discerning regularities in occurrence it insulates us from dwelling directly with the cold, indifferent and unbearable loneliness of a meaningless world, whilst oftentimes encouraging us to glance anew at our condition aglow, as it is, with mystery and doubt.¹⁹

Hence, a core purpose of this work is to encourage academic and business readers surrounded by capitalist values, claims and institutions to "glance anew at our condition" through encountering enterprises both profoundly different from ours, yet eerily familiar. It reconstructs practices of socialist businesses in a particular place located well outside business history's customary boundaries, providing implicit comparisons and contrasts.

Business history is a peculiar academic discipline, ever entwined with the advances and reverses of modern capitalism, particularly in addressing private corporations' roles as vehicles for economic expansion and for their owners' accumulation of wealth and power. Although shelves of studies treat Communist politics, economic development, and foreign affairs, comparable business history work has been minimal. Social scientists, particularly Western economists, did make repeated macro-assessments of Communist performance, first for the Soviet Union from the 1930s, then less frequently, for its postwar Central European "satellites." Amid Cold War antagonisms, Soviet- and China-watchers built commentary and critique in a domain

called “comparative economic systems.”²⁰ Many of their analyses remain compelling.²¹ Yet over at the business history festival grounds, crowded with celebrations of capitalist railway, mining and manufacturing giants, consumer-goods specialists, organizational innovators and stock market traders, plus hordes of multinationals, business groups, and transnational organizations, Communist enterprises remained outside the gates.²² Why?

For one thing, many business histories analyzed *individual firms* through research in their own records or in public archives that preserved, for instance, patent and litigation documentation or regulatory contests. Such evidence on Communist bloc enterprises was not available during the Cold War, and though socialist economists did analyze some sectors, their work was not historical inquiry.²³ Second, few among the largely Anglo-American (and increasingly Japanese) cohort of business historians in the 1960s–1980s had working knowledge of the relevant languages, obstructing possible research. Third, even were historical sources accessible, the principles and practices of communist firms (Were they actually firms or just extensions of state agencies?²⁴) inverted those that capitalist companies implemented. No competition for customers, instead, state-assigned clients for deliveries; no price battling, instead, ministry-fixed pricing; no market tests for output planning, instead, state-determined quotas and goals; no capital markets and stock trading, instead, state-allocated capital funds (no shareholders of any sort); no profits to distribute, instead, surpluses sent to state treasuries, with portions of socialist profits remaining with firms. Worse, perhaps, no bankruptcies as consequences for failures, instead state support for continued operations; no managerial power to dismiss lax or troublesome workers; instead, commitments to full employment that virtually guaranteed overstaffing; and, as well, few material incentives for improving efficiency and productivity. Finally, what to make of political supervision of management decision-making by interfering commissars, Party secretaries or cadres—all of whom had to be dealt with through compromises, deflections, or confrontations? Although these dichotomies are drawn too sharply, researching the history of Communist practices’ emergence and revision rarely attracted business historians, understandably.

Finally, once the Soviet bloc disintegrated in the 1990s, why would anyone investigate these losers and their trek to oblivion? Indeed, in Central European states transitioning to capitalism, domestic historians showed little interest in Communist business or economic history, even as source collections began to open.²⁵ However, in business history, scholars documenting Western multinationals penetrating emerging economies began exploring local business communities, institutions, and practices from

the viewpoints of those initiating and implementing them.²⁶ Many target nations (South Korea, Indonesia, Brazil) had state-owned enterprises (SOEs) and/or extended, diffuse business groups, often family-owned (e.g., *chaebols*). Such firms behaved differently from Western corporations, ignoring general principles of management, yet many seemed to thrive. Here business historians accomplished path-breaking work, as did scholars in adjacent fields (political economy, organization studies).²⁷ The mass privatization of once-socialist SOEs in the 1990s triggered many inquiries into conversion processes, but not a wave of historical research on their Communist-era operations. Nor did the twenty-first-century persistence of the PRC as an economically dynamic one-party state, with hybrid socialist/capitalist institutions, generate enthusiasm among business historians for reviewing enterprise practices in Mao's decades.²⁸ Hence, in a sense, this book begins to break a perhaps little-noticed silence about communist business practice. Far from filling this gap, this study indicates its considerable scale and scope.

Although this volume is not a contribution to mainstream Chinese historical studies, remarks by a leading specialist may indicate its utility. In 1995 Madeleine Zelin, commenting on "the labor practices of firms," urged her colleagues "to look at the conditions under which these practices emerged," to step back from big concept inquiries "and ask smaller questions. How did business work? What mechanisms, institutions and patterns of interaction were used to solve what problems, and to what new problems did they give rise?"²⁹ In this spirit, the present work sketches local practices and experiments in problem-solving, far more than "big question" issues, seeking to show "how things worked" as fully as feasible, rather than to classify or explain.³⁰ If it proves of value to China specialists, insofar as it steps down from policy-making heights to sites of practical management and labor, so much the better.

Finally, a few comments on the notion of New China as an experimental place and process. Surely building the People's Republic was a grand experiment, as was the Great Leap,³¹ but in what follows, experiments will chiefly be encountered at the firm, sector, or county (*xiàn*) level. For example, in December 1960, Beijing's "Synthetic Fibers Experimental Plant held its grand opening and formally entered production." An East German-backed nylon initiative to compensate for insufficient cotton supplies, it introduced complex foreign technologies that chemical technicians needed to master.³² Within a working textile mill, however, experiments yielded new fabric varieties (pre-shrunk, crease- and water-resistant goods), as well as new techniques (dye-suspension printing), both of which needed to be refined through testing.³³ A rural ironworks undertook to learn steel-ingot rolling in 1959,

learning by trial-and-error during “experimental work... done in less than a fortnight.” Reportedly, “everybody made daring suppositions, precise calculations, repeated evaluations and comparisons and finally came up with a preliminary designing method.”³⁴ Meanwhile, in 1960 a southern commune tried to use stationary engines pulling plows by ropes, to reduce the damage from water buffaloes “trampling on the fields.” “Experiment, research and practical application” confirmed the new practice’s “superior features.”³⁵ In commerce, Beijing finance and trade cadres announced that the way “to follow the red and expert road” was to recognize that “Experimentation is a Good Method of Investigation and Study.” Cadres needed to attend fewer meetings, so as to “take part in practice and undertake some experimental work.”³⁶ To be sure, much in management, engineering, cultivation, or construction was not experimental. Yet alongside routine enterprise practices, a counterpoint theme—“we must do better”—stimulated socialist experimentation, at times orchestrated by campaigns from the center and at times bubbling up from local problem-solving. Such efforts expanded capabilities and built skills, no small thing in the PRC’s first generation.

1.2 Practical Matters

The following narrative deploys in two Parts, the first in four chapters, the second, in five. It commences with the period from 1950 through the demise of the Great Leap Forward, ca. 1961, discussing agriculture, infrastructure/ construction, commerce, and industry by turn. After a brief introduction, Part Two treats the same sectors during the “adjustment period” of recovery and consolidation, 1961–1966, then closes by sketching the intersection of business and the Cultural Revolution, 1967–1971. The Afterword briefly reviews the status of business activity and economic growth in the early 1970s. Several conventions are employed. To make accessing sources straightforward, the older Wade-Giles rendering of Chinese names and locations will be used in citations, thus Hupeh province; whereas in text, current-day *pinyin* spellings are adopted, hence Hubei.³⁷ Second, values expressed in Chinese yuan (¥) are also regularly reported in US dollars, through an “imputed” exchange rate: ¥2.48 = \$1.00, which held steady for much of this period. As there was no trade between the PRC and the USA before the mid-1970s, the rate represents an extension from the yen, for Japan had extensive commercial dealings.³⁸ Next, Chinese statistics in this era are a continuing matter of contention, some arguing they are chiefly propagandistic, others that they have proven reliable in research. In any

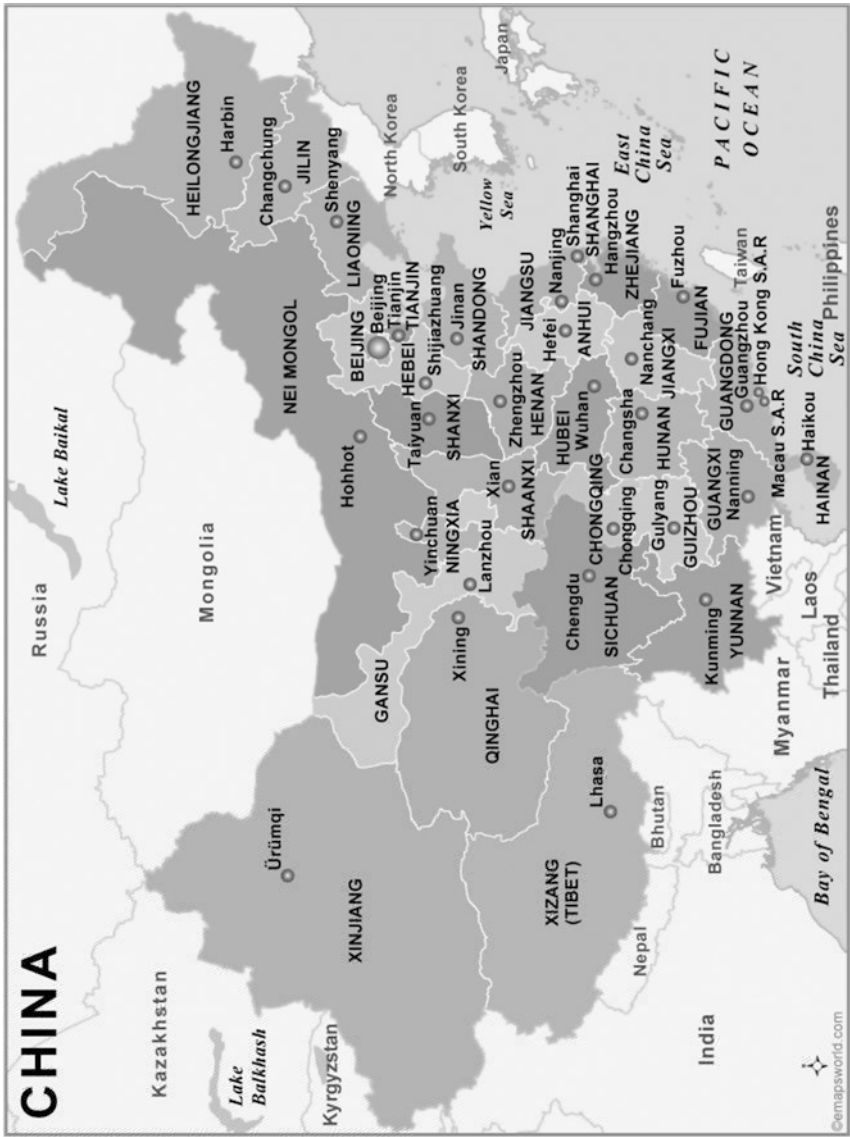


Fig. 1.2 People's Republic of China: Provinces and Capitals (Courtesy of eMapsWorld.com)

event, as a CIA analyst noted thirty years ago, PRC reports have a predilection for using “approximate numbers,” designed to be inexact.³⁹ In this work, which is by no means data-driven, numbers should be viewed as suggestive, much like words (except in engineering situations). Last, a map showing China’s provinces and their capitals is included to help readers unfamiliar with the nation’s geography (Fig. 1.2), and an appended Note on Sources discusses archives central to the research process.

Notes

1. W. K., “The Chinese Economy,” *Ost Europa Wirtschaft* (Eastern European Economy), September 1962, Joint Publications Research Service (hereafter JPRS), Report 17746, 20 February 1963, 1.
2. K. S. Karol, *China: The Other Communism* (New York: Hill & Wang, 1967), 220–221.
3. Lynn White III, *Policies of Chaos* (Princeton: Princeton University Press, 1988), 21.
4. Ann Florini, Hairong Lai, and Yeling Tan, *China Experiments: From Local Innovations to National Reform* (Washington, DC: Brookings, 2012), 4. Mobo Bao adds: “The Chinese government still carr[ies] out a lot of experimentation before a policy is implemented. The most celebrated example is the special economic zone of a small fishing village, Shenzhen, where the policy of attracting foreign investment was experimented with before it unfolded all over China.” Mobo Bao, *Constructing China: Clashing Views of the People’s Republic* (London: Pluto, 2018), 3.
5. Ibid. See also <https://www.marxists.org/reference/archive/mao/works/red-book/ch23.htm> for Mao Zedong on “Investigation and Study.” As Lu T commented in 2008 post, “Even now, Mao’s words are quoted frequently among many Chinese people, especially those of middle-age [for instance], “no research, no right to speak (*meiyou diaocha yanjiu*) (*jiu meiyou fayan quan*)” refers to the necessity of doing investigation when working.” <https://answers.yahoo.com/question/index?qid=20081006204112AA9HHkq&-guccounter=1> (both accessed 11 July 2018).
6. See Philip Scranton, “Managing Communist Enterprises: Poland, Hungary and Czechoslovakia, 1945–1970,” *Enterprise and Society* 19 (September 2018): 492–537.
7. David S. G. Goodman, *Centre and Province in the People’s Republic of China: Sichuan and Guizhou, 1955–1965* (Cambridge: Cambridge University Press, 1986), 10–11.
8. Audrey Donnithorne, *China’s Economic System* (New York: Praeger, 1967). Another significant resource for this study has been Andrew Walder,

- Communist Neo-Traditionalism: Work and Authority in Chinese Industry* (Berkeley: University of California Press, 1988). His notions of communist social networks, “instrumental-personal ties,” and “institutionalized clientelism” have clarified otherwise-confusing sources.
9. See CIA, “Mobilization and Allocation of Resources Through the National Budget of Communist China, 1950–1955,” 15 June 1956 (Secret, declassified 17 April 2000, CIA-RDP79-01093A001100070001-9).
 10. Hosokan Masahito, “The Naked Face of Communist China,” *Nihon Keizai Shimbun* (Japan Economic News), 17 and 19 December 1963, JPRS 23143, 7 February 1964, 22–28; Janusz Grochulski, “Water Economy Problems in China,” *Gospodarka Wodna* (Water Economy), July 1963, JPRS 21456, 15 October 1963, 31–44; and Charles Greer, *Water Management in the Yellow River Basin of China* (Austin: University of Texas Press, 1979).
 11. See Yang Jisheng, *Tombstone: The Great Chinese Famine, 1958–62* (New York: Farrar, Strauss and Giroux, 2012) for an exhaustive analysis, and Zhou Xun, *The Great Famine in China, 1958–62: A Documentary History* (New Haven: Yale), 201.
 12. Such work in Republican China was compulsory and unpaid. Provincial cadres soon discovered continuing this practice brought resentment and sloppy work. Payment, usually from local or co-op (later commune) funds, yielded better outcomes, but was challenged by Cultural Revolution activists denouncing material incentives.
 13. The US long forbade trade with the PRC, a policy that ended in 1972 (John Garson, *The US Trade Embargo Against China* [New York: Praeger, 1971]).
 14. Arthur Ashbrook, Jr., “China: Economic Policy and Economic Results, 1949–71,” in *People’s Republic of China: An Economic Assessment*, Joint Economic Committee, 22nd US Congress, 2nd Session, 12 May 1972 (GPO: Washington, DC, 1972), 4–47, quotes from 29 to 31.
 15. Charles Cell, *Revolution at Work: Mobilization Campaigns in China* (New York: Academic Press, 1977).
 16. Anne Cheng, “La valeur de l’exemple ‘Le Saint confucéen: de l’exemplarité à l’exemple,” *Extrême-Orient, Extrême-Occident*, No. 19 (1997): 73–90.
 17. Ezra Vogel, “From Revolutionary to Semi-Bureaucrat: The ‘Regularization’ of Cadres,” *China Quarterly*, No. 29 (1967): 36–60. See also John Wilson Lewis, “The Leadership Doctrine of the Communist Party,” *Asian Survey* 3 (1963): 457–464.
 18. Capital for industry and construction derived from agricultural tax payments and state re-selling of required agricultural goods purchases, whereas surpluses retained in the countryside generated cash households used for buying implements, kitchen ware, straw mats, et al.
 19. Robin Holt, “Review of Reimagining Business History,” *Business History* 58 (2016): 149–153.

20. See Joseph Schumpeter, *Capitalism, Socialism and Democracy* (New York: Harper, 1942), then postwar texts: Theo Suranyi-Unger, *Comparative Economic Systems (CES)* (New York: McGraw-Hill, 1952); Jan Pryblya, *CES* (New York: Meredith, 1969); and Richard L. Carlson, *CES* (Armonk, NY: M. E. Sharpe, 1990).
21. For decades, Nicholas Lardy and Thomas Rawski have been particularly insightful on China's economy. On the USSR, see R. W. Davies and Mark Harrison, eds., *The Economic Transformation of the Soviet Union, 1913–1945* (Cambridge: Cambridge University Press, 1994); Robert C. Allen, *Farm to Factory: A Reinterpretation of the Soviet Industrial Revolution* (Princeton: Princeton University Press, 2003).
22. There are a handful of Soviet studies, however. See, for example, Joseph Berliner, *Factory and Manager in the USSR* (Cambridge: Harvard University Press, 1957); idem., *The Innovation Decision in Soviet Industry* (Cambridge: MIT Press, 1967); and Karl Wadekin, *The Private Sector in Soviet Agriculture* (Berkeley: University of California Press, 1973).
23. Janos Kornai, *Overcentralization in Economic Administration: A Critical Analysis Based on Experience in Hungarian Light Industry* (Oxford: Oxford University Press, 1959).
24. Another long-standing vector in business history addressed business-government relations (conflicts, compromises, capture), but these businesses were part of governments, so their histories seemed uninteresting.
25. Personal communication from Pal Germuska, 1956 Institute, Budapest, April 2017.
26. For an exemplary study focused on colonial and post-colonial shipping, see Michael Miller, *Europe and the Maritime World: A Twentieth Century History* (Cambridge: Cambridge University Press, 2012).
27. See Pier Angelo Toninelli, ed., *The Rise and Fall of State Owned Enterprises in the Western World* (Cambridge: Cambridge University Press, 2008); In Jun, Peter Sheldon and Seung-Ho Kwon, *Business and Labor in Korea: Chaebols, Their Association and Industrial Relations* (New York: Routledge, 2018); Asli Colpan, Takashi Hikino, and James Lincoln, eds., *The Oxford Handbook of Business Groups* (New York: Oxford University Press, 2010); Benedicte Bull, Fulvio Castellacci, and Yuri Kasahara, eds., *Business Groups and Transnational Capitalism in Central America* (New York: Palgrave, 2014). On SOEs: Rick Harris and William Martin, eds., *State-Owned Enterprises and State Capitalism in China* (London: Nova Science, 2012). See also Barry Naughton and Kellee Tsai, eds., *State Capitalism, Institutional Adaptation, and the Chinese Miracle* (Cambridge: Cambridge University Press, 2015). The editors' introduction sensibly notes that "China is not transitioning teleologically from state socialism to market capitalism... The state retains control of strategic sectors, engages in industrial policy, and holds a dominant position in the banking sector and equity markets" (3).

28. A sizable literature on the PRC's economy was penned by contemporary observers and visitors in the 1950s and 1960s; few of these were historians, though many sought to situate current events within China's twentieth-century-trajectory.
29. Madeleine Zelin, "Critique of Scholarship on Chinese Business History in the People's Republic of China and Taiwan," in Robert Gardella, Jane Leonard, and Andrea McElderry eds., *Chinese Business History: Interpretive Trends and Priorities* (Armonk, NY: M. E. Sharpe, 1998), 95–105. Joining current scholarly debates about the merits or miseries of the Mao era is not a goal here, though the books' findings reinforce more the cellular economy side of a 1960s–1970s controversy than the top-down control (totalitarian) arguments advanced.
30. This distinction stems from a comment by Simone de Beauvoir, who "observed that novels by phenomenologists were not as dull as those of some other philosophers because they described instead of explaining or putting things in categories. Phenomenologists take us to the 'things themselves.' One might say they embody the creative writing mantra, 'Show, don't tell.'" (Sarah Bakewell, *At the Existentialist Café* [New York: Other Press, 2016], 107.)
31. "The frenetic leap forward and commune programs are the latest and most radical of a series of experiments which the CCP has undertaken." CIA, National Intelligence Estimate 15–59, "Communist China," 28 July 1959, 4 (Secret, declassified June 2004, no ID number).
32. "Beijing Synthetic Fibers Plant Enters Production," *Hua-hsueh Kung-yeh* (Chemical Industry), 27 December 1960, JPRS 6264, 21 November 1960, 3.
33. Tu Yen-sun, "The Situation and Prospect of the Technical Revolution in the Dyeing Industry," *Chung-kuo Fang-chih* (China Textiles), 15 August 1958, JPRS 927-D, 18 September 1959, 2–4.
34. "Courage to Think and Courage to Act," *Yeh-chin-pao* (Metallurgical Journal), 4 February 1960, JPRS 5641, 8 November 1960, 8–13.
35. "Develop Scientific Research in Agricultural Machinery, Starting with China's Special Characteristics," *Kuang-ming Jih-pao* (Enlightenment Daily), 3 January 1961, JPRS 7809, 7 March 1961, 1–7.
36. "Experimentation is a Good Method of Investigation and Study," *Tu Kung Pao* (Impartial Daily), 9 February 1961, JPRS 8298, 9 May 1961, 37–42.
37. A helpful online tool for converting Wade-Giles to pinyin spelling may be found at: <https://www.chineseconverter.com/en/convert/wade-giles-to-chinese>.
38. Figures for yuan in early PRC sources have been deflated to reflect the 10,000:1 currency reform of 1955. Thus a million yuan, reported, say, in a 1953 document reduce to ¥100. See Tseng Ling and Han Lei, *The Circulation of Money in the People's Republic of China*, 1959, JPRS 3317, 1 June 1960. During most of the 1950s and 1960s, one yuan was worth

145–146 yen; and as one US dollar brought about 360 yen, for scholarly purposes, ¥2.48 equal a dollar's value.

39. Ian MacFarland, "Understanding and Using Chinese Statistics: The Cement Industry as an Example," *Journal of International Law and Economics*, 13 (1979): 619–631.

Part I

**Business Practices from Liberation Through
the Great Stumble, 1950–1961**