China's Great Economic Transformation

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2008
In this book, a large and diverse group of researchers pool their knowledge to take the measure of China’s massive, protracted, and unexpected economic upsurge, which began in the late 1970s and continues as this is written nearly thirty years later. The magnitude and rapidity of China’s recent gains stand out even against the background of stunning growth among China’s East Asian neighbors during the late twentieth century.

China’s extended boom began at remarkably low levels of income and consumption. Its growth spurt is remarkable for its geographic spread as well as its speed and longevity. While coastal regions have led the upward march of output, exports, and income, China’s central and western regions have recorded enormous gains as well.

A brief summary can delineate the magnitude of China’s recent economic achievements. One careful review of available data finds that average gross domestic product (GDP) growth increased from approximately 4 percent prior to the reform to 9.5 percent during 1978–2005 (see Chapter 20). Although Young (2003) and others label recent growth as extensive, meaning that the main motive force comes from adding more labor and capital to the production process, the same study finds that productivity improvement accelerated from 0.5 to 3.8 percent per annum after the reform, with productivity change accounting for 40.1 percent of overall GDP growth during 1978–2005, as opposed to 11.4 percent during 1952–1978 and −13.4 percent (i.e., a productivity decline) during 1957–1978 (see Table 20.2).

Tables 1.1 and 1.2 use purchasing-power parity data from the Penn World Tables and the World Bank to compare trends in aggregate and per capita GDP for China and several other nations. Prior to 1978, China’s overall output grew somewhat faster than GDP in the United States and India, but lagged dramatically behind Japanese performance. After 1978, rapid expansion in China’s relative economic size became the norm, pushing Chinese output from 37.5 percent of Japan’s 1978 figure to 219.2 percent of Japan’s 2004 GDP, and so on (Table 1.1).

Table 1.2 shows similar trends in per capita GDP. Prior to reform, China recorded slight gains with regard to India and the United States, but lagged far behind Japan...
China's economy has abandoned its former isolation in favor of deep engagement with world markets. The trade ratio, which measures the combined value of exports and imports as a share of GDP, jumped from under 10 percent prior to reform to 22.9 percent in 1985, 38.7 percent in 1995, and 63.9 percent in 2005—a level far higher than comparable figures for any other large and populous nation and Korea. After 1978, the picture changes dramatically, with Chinese per capita income doubling its level relative to that of Korea and achieving even faster growth relative to India, Japan, and the United States.

Rapid advance in output per capita has elevated hundreds of millions from absolute poverty. Ravallion and Chen (2004) report a steep decline in the proportion of rural Chinese mired in absolute poverty; using an early official poverty indicator, the share of impoverished villagers drops from 40.65 percent in 1980 to 10.55 percent in 1990 and 4.75 percent in 2001. A second indicator shows higher proportions living in absolute poverty, but indicates a comparable trend (75.7 percent impoverished in 1980 and 12.49 percent in 2001).

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Table 1.1. China’s GDP as a percent of GDP for other large nations, 1978–2004a

<table>
<thead>
<tr>
<th>Year</th>
<th>United States</th>
<th>Japan</th>
<th>Germany</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>1952</td>
<td>9.5</td>
<td>78.5</td>
<td>n.a.</td>
<td>63.9</td>
</tr>
<tr>
<td>1978</td>
<td>13.6</td>
<td>38.5</td>
<td>50.8</td>
<td>78.0</td>
</tr>
<tr>
<td>1990</td>
<td>27.9</td>
<td>70.5</td>
<td>113.3</td>
<td>122.2</td>
</tr>
<tr>
<td>2000</td>
<td>51.7</td>
<td>165.9</td>
<td>244.8</td>
<td>190.6</td>
</tr>
<tr>
<td>2004</td>
<td>64.0</td>
<td>219.2</td>
<td>322.1</td>
<td>203.1</td>
</tr>
</tbody>
</table>

a Calculated at purchasing-power parity.

Table 1.2. China’s per capita GDP as a percent of figures for other nations, 1952–2005b

<table>
<thead>
<tr>
<th>Year</th>
<th>United States</th>
<th>Japan</th>
<th>Korea</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>1952</td>
<td>2.7</td>
<td>11.8</td>
<td>25.4a</td>
<td>42.6</td>
</tr>
<tr>
<td>1978</td>
<td>3.2</td>
<td>4.6</td>
<td>15.0</td>
<td>53.7</td>
</tr>
<tr>
<td>1990</td>
<td>6.3</td>
<td>7.7</td>
<td>16.4</td>
<td>90.3</td>
</tr>
<tr>
<td>2000</td>
<td>11.6</td>
<td>16.7</td>
<td>25.5</td>
<td>151.4</td>
</tr>
<tr>
<td>2005</td>
<td>15.7</td>
<td>30.1</td>
<td>30.1</td>
<td>188.5</td>
</tr>
</tbody>
</table>

a Measured at purchasing-power parity.
b Annual figure for each comparator nation equals 100.

Following a quarter century of liberalization, markets for products, labor, and materials are well developed and increasingly competitive. While investment decisions, capital markets, and transfer of ownership rights still bear the imprint of official preferences, the overall impact of market forces continues to deepen. Despite the dominance of state ownership in finance, telecommunications, steel, petroleum, tobacco, and other important sectors of the economy, private entrepreneurs continue to push into sectors formerly reserved for public enterprise. The Organisation for Economic Co-operation and Development’s estimates show the private sector, which scarcely existed at the start of reform, accounting for 59.2 percent of China’s gross domestic product for 2003 (OECD, 2005, p. 125).

These momentous shifts, from poverty to growing prosperity, from village to city, from plan to market, from public toward private ownership, and from isolation to global engagement, form the backdrop for this book, which aims to develop an integrated perspective on these remarkable events. In recruiting and guiding our authors, we sought to focus attention on basic questions of long-term significance. How and why did China vault from the moderate growth attained during the plan era (roughly 1952–1978) onto a new path of explosive growth? Once begun, how was the new pace of growth maintained? How did rapid expansion spread across sectors and regions? How did particular sectors and regions contribute to the spurt? How have changing policy structures accelerated or hindered China’s economy? What factors constrain China’s current and future growth? The chapters that follow address these and many other issues from multiple perspectives. The present essay seeks to establish an analytical framework for examining China’s economic evolution since the formation of the People’s Republic in 1949.
BACKGROUND: CHINA'S ECONOMY PRIOR TO THE START OF ECONOMIC REFORM

China's economy experienced modest, but significant, growth in the decades prior to the outbreak of full-scale war with Japan in 1937 (Brandt, 1989; Rawski, 1989). The pattern of pre-World War II economic advance reflected China's openness to international trade and investment. Prewar expansion clustered around two growth poles: the Yangzi Delta area centered on Shanghai, where thriving domestic and foreign private business propelled regional growth; and the northeastern provinces, where infusions of officially directed Japanese capital, technology, and expertise energized an expansion that prefigured the planned economy of the 1950s.

By the 1930s, China had developed a modern sector spanning industry, communications, transportation, banking, and finance, in which domestic ownership predominated. Although this nascent modern sector never surpassed one-tenth of GDP, its rapid development, along with China's growing integration with the international economy, had catalytic effects on agriculture and other sectors that pushed the economy toward modest gains in per capita GDP (Rawski, 1989). Before the collapse of international trade that followed the onset of the Great Depression, China's share of world trade and its own ratio of foreign trade to GDP achieved levels that were not regained for over sixty years (Lardy, 1994). These achievements look even more impressive when viewed in light of the limited capacity of the Chinese state to promote economic development.

Following disruptions arising from an eight-year battle against Japanese invaders, followed by several years of civil strife between Communist and Kuomintang forces, the People's Republic of China, established in October 1949, inherited an economy whose growth potential was obscured by the ravages of war and inflation. Successful application of orthodox macroeconomic policies quelled inflation, restored fiscal balance, revived the money economy, and encouraged a rapid economic revival (Perkins, 1966).

The new regime then moved to create an economic system largely modeled after Soviet experience. Soviet advisers and Soviet-trained specialists worked to establish new institutions organized around annual and five-year plans, extensive state ownership, central control over prices, and material balance plans that issued specific directives governing the allocation of major inputs, products, and financial flows. As in the USSR, the key plan objective was to raise domestic saving, particularly by extracting resources from the rural sector, and to channel these funds toward industrial growth.

China's system was not a carbon copy of the Soviet Union's. Mao Zedong broke new ground by herding Chinese villagers into large-scale collectives known as people's communes in 1958. In addition, management of Chinese industry was significantly less centralized than in the Soviet Union, with substantial authority vested in provincial and local plan bureaucracies (Wong, 1986). Despite these and other differences, the institutions of Chinese planning generated behavior characteristic of what came to be known as "Soviet-type" economies.

During the quarter century prior to the start of economic reform in the late 1970s, China's plan system delivered mixed results (Howe, 1978; Riskin, 1987; Naughton, 1995). Rising rates of saving and investment promoted economic growth, despite short-term disruptions associated with the Great Leap Forward of the late 1950s and the Cultural Revolution of the late 1960s. World Bank estimates covering 1950-1975, a period roughly coterminous with China's plan era, show that China recorded average annual growth of 4.2 percent in per capita GNP, a figure surpassed by only ten of seventy-seven industrialized nations, most of them oil exporters. During these years, China's planned economy outperformed other populous developing nations, including Brazil, Egypt, India, Indonesia, and Mexico, often by substantial margins (Morawetz, 1978, pp. 19-21).

Large-scale technical aid from the socialist bloc helped China to introduce new industries, for example, the manufacture of trucks and equipment for power plants and telecommunications, and to upgrade others. In addition, urgent restructuring efforts necessitated by the downturn following the 1959-1961 famine and simultaneous withdrawal of East Bloc technical aid revealed new technological capabilities on the part of both old and new Chinese firms (Rawski, 1975, 1980).

China's plan system also delivered important gains in the creation of human capital. Mortality, especially among infants and new mothers, declined, and school attendance and educational attainment increased. Census data revealed an increase of slightly more than 50 percent in life expectancy from 42.2 (45.6) years in 1950 to 66.4 (69.4) years in 1982 for males (females). School enrollments increased at all levels; the spread of education reduced the proportion of Chinese aged 16-65 who had not completed primary school from 74 to 40 percent between 1952 and 1978 (see Tables 15.1 and 20.1; see also Chapter 7).

These important achievements coincided with significant failures, most obviously in the area of food supply. The man-made famine of 1959-1961 killed 30-40 million Chinese. Food scarcity did not end in 1961: average rural diets continued to fall short of basic nutrition standards until the start of reform. As a result, food supplies for millions of Chinese villagers were no better in the 1970s than in the 1930s (Lardy, 1983; Bramall, 1989; Rawski, 2006).

Material conditions were better for city dwellers, although they too experienced little improvement in the level of consumption or the variety of (often rationed) commodities after 1957. Urban residents received larger food allotments than villagers. They also benefited from privileged access to government-funded education, health care, housing, and pensions. Substantial differences in income and life chances favoring urban dwellers obliged the regime to curtail migration to the cities by reviving China's traditional system of household registration (hukou) and by instituting tight controls over the distribution of food grains, urban housing, and other consumer essentials (see Chapters 18 and 19).
Despite rising output, industry suffered from the inefficiencies associated with Soviet-style central planning: emphasis on quantity at the expense of quality and assortment, focus on investment goods rather than consumer products, neglect of innovation and customer requirements, excessive vertical integration, plan-related seasonal fluctuations in output and investment, and large inventory accumulations (Rawski, 1980).

Underdevelopment of services exacerbated these weaknesses. Neglect of services follows Marxist theory, which omits most tertiary activities from the national accounts. China’s intermittent campaigns targeting intellectuals, including a decade-long closure of universities and many other schools during the Cultural Revolution, intensified the relative decline of services. By the end of the plan period, education-linked wage differentials had largely vanished: one study noted that average pay levels in the catering sector exceeded wages in higher education (Hou, 1999, pp. 184–185).

China’s isolation from the international economy further enlarged the gap between achievement and potential. The combination of Beijing’s autarchic tendencies and a U.S.-led partial trade embargo constricted Chinese participation in global markets (Eckstein, 1966; Lardy, 1994; see Chapter 16). This deprived Chinese producers of valuable information, removed Chinese firms from the discipline and goal of international competition, and skewed domestic output away from the mix associated with comparative advantage. Official efforts to limit domestic as well as international specialization heightened the resulting barriers to the growth of output and productivity (Donnithorne, 1972; Lardy, 1983).

Macroeconomic statistics for 1952–1978 demonstrate the impact of these shortcomings. During this period, China’s economy benefited from a wide array of favorable circumstances, including improved technology, rising education levels, low inflation, and, with notable exceptions, domestic political stability. Although each of these factors should contribute to higher productivity, available data show no substantial upward trend for multifactor productivity (meaning output per unit of combined capital and education-enhanced labor) during the plan period (see Table 20.2). In reality, productivity might have declined, which would help to reconcile the failure of rising investment rates during the 1960s and 1970s to accelerate GDP growth (Field, 1983; Ishikawa, 1983).

A quarter century of socialist planning left China’s economy riddled with multiple inefficiencies. Market segmentation between the rural and urban sectors, barriers to economic flows across administrative boundaries, and differentials in the marginal productivity of capital and labor between farming and nonagriculture, between private and collective plots, and between producer and consumer manufactures all pointed to a large-scale misdirection of resources, a sure sign of static inefficiency. The economy also suffered from wide and persistent gaps between actual and potential output – what economists call “X-inefficiency.” Widespread shirking limited productivity in both agriculture and industry.

Planners typically classify outcomes as satisfactory or unsatisfactory. In the absence of special recognition or reward for improvements in quality, variety, cost, or productivity, advances in these areas become uncompensated gifts from producers, who bear the expenses and risks linked to upgrading efforts. Without direct intervention by political leaders (“innovation by order”), innovative effort is shunted aside in favor of pursuing short-term targets for physical output (“fulfilling the plan”). The result is a general failure of dynamic efficiency, as the expansion of society’s production frontier lags behind the potential embodied in available knowledge and resources. The consequences are readily visible within individual firms, as when First Auto Works, one of China’s premier manufacturers, found its “obsolescence of equipment and models worsening day by day” following “thirty years of standing still” (Li, 1993, p. 83), and also at the macroeconomic level.

We see three underlying sources of productivity stagnation and rampant inefficiency in China’s planned economy: noneconomic policy objectives, weak institutions, and poor incentives.

Although China’s leaders valued material progress, considerations of national defense and ideology frequently trumped economics during the plan era, with predictably negative effects on output and productivity. Security considerations, for example, dictated the movement of factories from coastal cities to interior regions during the 1950s. Fear of external attack also inspired the “Third Front” policy of the 1960s, which poured massive investments into remote regions (Naughton, 1988). In similar fashion, the pursuit of ideological objectives imposed economic costs, as when schools were closed and urban youths were forced to migrate to rural villages or when small-scale commerce was curtailed to protect citizens from the supposed evils of capitalism’s “silver bullets.”

The plan system’s hostility to entrepreneurship enforces uniformities that inflate firm-level rigidities into economywide excesses. In a market system, if firms cannot obtain repair services in December, entrepreneurs may seek to profit by addressing this gap. But planning earmarks investment funds for specific projects and concentrates research activity in government institutes (which in China often neglected applied studies that could offer immediate support to manufacturing operations), leaving few opportunities for such reactive improvisations. Similar obstacles bedevil innovative efforts within existing enterprises. In the absence of high-level patronage, managers find it difficult to justify the expense, delay, and failure associated with efforts to develop new products and processes.

Weak incentives compound these difficulties. In a market system, individuals and enterprises can expand sales and improve financial outcomes by outdoing rivals in satisfying old and new customers. Under the plan, with both the volume and the direction of sales mandated by official fiat, producers experience neither the opportunity to expand through their own initiative nor the threat of being eclipsed by rival suppliers. As a result, plan systems fail to generate the automatic, decentralized pressure for improvement that suffuses all market systems.
Everyone recognized the death of Mao Zedong in 1976 as a major turning point for the People's Republic. There was wide agreement among China's political elite about the need for economic change, without, as Naughton (see Chapter 4) observes, any clear sense of reform direction. Two economic issues stood behind this consensus. Although China's economy had performed well compared to low-income nations worldwide, China's standing within East Asia was weak. Japan and (South) Korea, societies that many Chinese regard with disdain, had raced far ahead, as had Taiwan and Hong Kong, small entities crowded with refugees from the People's Republic and, in Taiwan's case, led by Chiang Kai-shek's reviled Kuomintang. China's obvious backwardness in its dynamic East Asian neighborhood galled Beijing's elites.

More specifically, the winding down of the Cultural Revolution disruptions failed to resolve chronic food supply problems. During the first half of the 1970s, rising numbers of grain-deficit households, reductions in grain stocks and in cross-provincial shipments, numerous reports of local shortages, and demands that the state return grain procurements to avoid "repeating the error of 1959"—an obvious reference to the Great Leap Forward famine—all point to a system near the brink of a serious food crisis, with no indication of sustained progress (Zhao, 1988, pp. 144–147).

With this background, it is not surprising that the story of China's reforms begins in the farm sector. There was a long history of poor results, with the danger of renewed crisis lurking in the background. The chief mechanism of reform—the restoration of household cultivation—had a proven track record from the 1960s. Protracted policy neglect of the farm sector meant that rural reform would not threaten important political constituencies (Pei, 2006, p. 31; see Chapter 4).

KEY FACTORS IN CHINA'S REFORM SUCCESS

Whatever its merits, China's plan system saddled the economy with costly defects, some inevitable in any plan system, others peculiar to the Chinese variant, that constrained China's economy to a path that delivered modest gains at best and indubitably failed to satisfy Chinese ambitions. In economic terms, Chinese socialism held the economy far below its production frontier while severely restraining the frontier's outward movement. In Japan, a similar knowledge gap combined with a shift from military to civilian production fueled a burst of catch-up growth beginning in the 1950s (Ohkawa and Rosovsky, 1973). China's bleak circumstances of the late 1970s concealed similar possibilities.

In the presence of large gaps between current and potential output, and of neglected opportunities to expand the production frontier, limited reform that even partially ruptures the shackles surrounding incentives, marketing, mobility, competition, price flexibility, and innovation may accelerate growth. Begin with an economy operating well below its potential, partly because its labor force, perceiving that effort hardly affects their incomes, withholds a substantial fraction of its available energy (which itself is reduced by chronic undernutrition). Now restore the link between effort and reward, permit a partial market revival, and open the door to experimentation with international trade and investment. Without the disruptive changes in trade flows and political structures that accompanied early reform efforts in the former Soviet Union and Eastern Europe, such simple initiatives—which approximate the circumstances of China's early reforms—can readily ignite a burst of growth, even if prices, financial institutions, judicial enforcement, policy transparency, corporate governance, and many other features of the economy remain far removed from ideal arrangements.

China's reform experience powerfully confirms the insights of Hollis Chenery, who insisted that pinpointing and then ameliorating key obstacles could accelerate growth in the absence of conditions that are widely seen as essential for development (e.g., Chenery and Strout, 1966; Chenery and Syrquin, 1975). Chinese evidence encourages us to think of a hierarchy of desirable features that support growth or, if absent, hinder it. These growth-enhancing conditions are not equally important.

In China, partial measures affecting incentives, prices, mobility, and competition—what we might term "big reforms"—created powerful momentum, which easily dominated the friction and drag arising from a host of "smaller" inefficiencies associated with price distortions, imperfect markets, institutional shortcomings, and other defects that retarded growth and increased its cost but never threatened to stall the ongoing boom.

Early initiatives in the farm sector illustrate the impact of limited reforms affecting incentives and mobility. Household cultivation replaced collective farming, as hundreds of millions voted with their feet to abandon the central feature of the people's communes. The shift to household cultivation meant that farmers could claim the fruits of extra effort for themselves, rather than receiving tiny shares of collective production. The restoration of household farming immediately reinstated the link between effort and reward throughout rural China. The resulting multiplication of work effort resulting from better incentives and, once output expanded, higher energy levels (a factor that figures prominently in historical studies by Nobel Laureate Robert Fogel, 2004) raised farm labor productivity so rapidly that millions of villagers began looking for outside employment. Substantial increases in official purchase prices, especially for grain, added to the rewards from extra effort.

With new incentives spurring work effort, farm output jumped quickly, even though the post-reform rural environment retained important elements of the planned economy. With the state firmly in control of major crop prices, trading networks, and fertilizer supplies, the reformed farm sector actually embodied fewer "free market" characteristics than Chinese agriculture of the early 1950s, not to mention the full market system of the 1920s and 1930s. But despite the rigidities and distortions associated with government control, a "big reform" affecting incentives created sufficient momentum to jump-start China's lethargic rural economy.

The response to early rural reforms quickly spread beyond the farm sector. Rural factories had enjoyed a brief boom during the Great Leap Forward, suffered a
considerable retrenchment during the 1960s, and then expanded rapidly during the 1970s. Following the revival of agriculture, rural industry, now fortified by greater access to the cities, rising incomes among potential rural customers, increased supplies of agricultural inputs, and throngs of eager job seekers, bounded ahead with renewed vigor. The resulting shift of employment from farming toward rural industry began the continuing exodus from farming that Brandt, Hsieh, and Zhu identify as an important component of economywide productivity change during the early reform years (see Chapter 17).

Encouraged by the explosive response to partial reform of the rural economy, officials pressed ahead with urban reform efforts focused on improving the performance of state-owned industry. Early urban reforms achieved only limited progress toward their main objective of “enlivening” state-owned enterprises (SOEs). They did, however, contribute to the expansion of rural industry and urban collective enterprises by opening new markets as well as new sources of materials, subcontracting opportunities, and technical expertise.

A unique policy innovation was instrumental in spurring the development of urban and rural collective industry as well as increasing market awareness and efficiency within the state sector (Li, 1997). Rather than eliminate plan allocations at official prices, China’s reformers created a dual price system that split transactions for most commodities into plan and market components. Once producers had satisfied plan requirements, they could now distribute after-plan residuals at increasingly flexible prices. This novel initiative thrust market forces into the economic lives of all Chinese households and businesses. Furthermore, this landmark change avoided the economic or political earthquakes associated with privatization (which threatens people’s livelihood) or full liberalization of prices (which eliminates long-standing subsidies and undercut the authority of plan agencies). The arrival of dual pricing instantly recast the plan system as a vast array of taxes and subsidies, recalling Paul Samuelson’s observation that the efficiency consequences of pure competition survive the imposition of a lump-sum tax-subsidy regime (Samuelson, 1954; Sicular, 1988).

This novel arrangement reversed two central shortcomings of the plan system: rigid prices and neglect of innovation. Participants in China’s economy — including the large SOEs at the core of the plan system — now faced a new world in which market prices governed the outcome of marginal decisions to sell above-plan output or purchase materials and equipment. Despite the continuation of subsidies and price controls, the high market price of coal, for example, signaled the likely future direction of price change and motivated users to plan accordingly.

Dual pricing opened the door to what Naughton (1995) has dubbed “growing out of the plan,” in which redirecting incremental output toward market allocation gradually reduces the importance of the plan sector without a political struggle. As noted earlier, incremental marketization cumulated into a dominant role for market outcomes. It also spurred the expansion of market integration: farm gate prices, for example, now display a high degree of interregional integration (see Chapter 13).

By the turn of the century, notwithstanding significant exceptions associated with the pricing of credit, risk, and foreign exchange, supply and demand had emerged as the main arbiters of prices throughout the Chinese economy.

Expanded, but still incomplete, price flexibility also facilitated the ongoing process of whittling away at barriers to mobility, which had restricted the transfer of labor, capital, commodities, and ideas across administrative boundaries under the plan system. The essays on labor, agriculture, structure, and spatial economy (see Chapters 6, 13, 17, and 19) emphasize the costs associated with these obstacles. The hukou system of residential permits offered the largest hindrance to mobility, curtailing productivity-enhancing transfer of workers out of agriculture and stunting the growth of urban service occupations. Additional restrictions arose from campaigns promoting local and regional “self-reliance,” which rolled back regional economic specialization, forcing many localities to rely the income-destroying experience of the 1940s by abandoning specialty crops (Shandong peanuts and Guangdong sugar) in favor of low-productivity subsistence farming.

Dual pricing enlarged markets that provided opportunities for entrepreneurs to purchase materials and equipment, manufacture (mostly consumer) products newly in demand or neglected by the plan system, and sell them profitably. The same markets allowed rural migrants to pursue employment opportunities, first in nearby towns and later in distant cities, where they could now use cash to purchase food and other essentials formerly available only to holders of location-specific ration coupons.

Market-oriented price reform and partial removal of restrictions that had prevented households and enterprises from seeking advantage from price gaps and changing prices provided a major impetus for accelerated growth. Although reform did not eliminate price distortions or barriers to the mobility of people and goods, the beneficial consequences of allowing people to respond to price signals were enormous. Villagers needed no precise calculation to see that they could raise their incomes by taking up nonfarm occupations; several hundred million recognized the opportunity and made the choice. Erosion of long-standing prohibitions against development of the tertiary sector produced an explosion of new activity involving restaurants, retail outlets, private schools, and a vast array of other activities. Here again, tens of millions responded to price signals that, however imprecise, indubitably reflected underlying resource scarcities.

As the influence of markets, price flexibility, and mobility expanded within the domestic economy, a separate strand of reform began to move China’s isolated system toward greater participation in international trade and investment. During the late 1970s, an abortive plan to expand imports under the short-lived regime of Hua Guofeng revealed huge latent demand for foreign equipment and technology (Riskin, 1987, pp. 259–261). In the ensuing debates, China’s leaders agreed to establish four tiny “special economic zones” in the southern provinces of Guangdong and Fujian. Initial operations in these zones seemed directionless and inconsequential, but the arrival of ethnic Chinese entrepreneurs, mostly from Hong
Kong and Taiwan, turned the zones into drivers of regional and eventually national growth.

Beginning in the late 1950s, Taiwan and Hong Kong had emerged as centers for small-scale manufacturing of labor-intensive exports. Rapid expansion raised land and labor costs, leading owners to search for new venues. The opening of south China provided an ideal opportunity for the Hong Kong and Taiwan entrepreneurs; it was also a remarkable stroke of luck for China’s nascent reforms. The offshore entrepreneurs uncoupled the pipeline they had established to world markets from their original home bases and reconnected it to China’s new export zones.

This novel combination of Chinese venues and low-cost Chinese labor with the market knowledge and entrepreneurial capabilities of overseas Chinese businessmen gradually developed into an export bonanza that nudged China toward its current embrace of economic globalization. The unprecedented confluence of rising farm output and rising exports removed long-standing constraints formerly imposed by limited availability of food and foreign exchange.

The limited extent of reform initially restricted the domestic response to growing openness. Large-scale reallocation of cultivated acreage from staple crops to vegetables, horticulture, and other labor-intensive alternatives, for example, came only after the government ended its policy of setting domestic grain prices above world market levels. Even so, the buoyant prosperity of the new zones, particularly Shenzhen, prompted cities along the coast and eventually across the nation to clamor for access to the tax, legal, and regulatory concessions that had powered their growth.

The boom in trade and export-related production established a new growth pattern that shifted the leading edge of Chinese growth southward. As with California in the United States, novel economic (e.g., mass privatization of collectively owned rural industry) or social (e.g., voluntary rather than compulsory blood donation) behavior often spread across the nation from Guangdong.

China’s progression from near-isolation to extensive openness to international trade and investment added a new dimension to economic growth. Access to commodities, information, and trade opportunities linked to international markets expanded steadily from the tiny initial base as the number of special zones and open cities rose and as the scope of permissible activity stretched to encompass direct foreign investment along with import–export trade. Rapid expansion of overseas study, international travel, and publication of information from abroad (including abundant translations) multiplied the points of contact between the domestic and global economies, as did the easy interchange with overseas Chinese entrepreneurs, tourists, and kinfolk.

Case studies demonstrate the contribution of imported technology, equipment, and expertise to industrial upgrading (see Chapter 15). The emergence of foreign-linked joint ventures, and eventually of wholly owned foreign firms, as major elements of China’s economy brought millions of Chinese workers, engineers, and managers into direct contact with the technical standards, engineering processes, and management practices needed to compete in global markets. The expansion of supply networks linked to export production or to foreign-owned businesses connected increasing numbers of purely domestic operators with international standards and practices. Growing foreign presence has consistently strengthened the demand for new reform initiatives, for instance, allowing firms to recruit employees through public advertisements (during the 1980s) or establishing a legal foundation for equipment leasing (during the 1990s).

From an initial position of extreme isolation, China has now attained a degree of openness that is unprecedented among large and populous nations (see Chapter 16; Brandt, Rawski, and Zhu, 2007). With few sectors of the economy effectively shielded from global markets, incumbent suppliers of soybeans, machine tools, retail services, and an endless array of other goods now confront the entry of rival producers from America, Italy, Japan, Bangladesh, or Brazil as well as Jilin, Zhejiang, or Sichuan. The resulting expansion of both dangers and opportunities has delivered enormous benefits. New export industries have raised the productivity and incomes of millions while accelerating the historic shift of labor from the farm sector. Imports have expanded consumer choice, contributed to the development of new industries and the improvement of old sectors, and pushed Chinese suppliers to raise standards and reduce costs. Foreign investment has injected immense flows of technology— for organization, management, and marketing as well as production— into China’s economy.

China’s reform era coincided with a new stage of globalization powered by rapid reductions in the cost of transport, communication, and information management. As a result, international markets have provided China with opportunities (and also risks) that far exceed those available at the time of Japan’s and Korea’s big growth spurts. This makes China an important test case for the hotly debated proposition that globalization offers important benefits to poor countries and to low-income groups in these nations. China’s experience to date powerfully supports the view of globalization as an engine for growth and prosperity. The open-door policy has tilted China’s whole economy toward labor-intensive production, hugely benefiting the mass of Chinese workers whose labor is their chief asset. By rewarding firms that raise quality standards toward global levels and punishing laggards, foreign trade and investment have motivated Chinese firms to abandon long-standing neglect of quality in favor of a broad-based upgrading effort that has enabled a growing array of Chinese products to compete in overseas as well as domestic markets.

Dramatic expansion of incentives, mobility, and markets created unprecedented opportunities for the formation of new enterprises and the expansion of existing firms (including foreign companies) into new markets. The scale of entry is startling: the number of industrial firms rose from 377,3 thousand in 1980 to nearly 8 million in 1990 and 1996; the 2004 economic census, which excluded enterprises with annual sales below RMB8 million, counted 1.35 million manufacturing firms, with Jiangsu and Zhejiang alone reporting more firms than the nationwide total for 1980 (Jefferson and Rawski, 1999, p. 25; Economic Census, 2004, 1, pp. 2, 23);
the number of enterprises in construction jumped from 6,604 to 58,750 between 1980 and 2005, with the latter total excluding subcontractors (Yearbook, 2006, p. 579).

The combination of entry and new flexibility has intensified competition within China's economy. Competition is in many ways the opposite of planning, which attempts to reduce economic uncertainty by pairing suppliers with customers and specifying the nature of future transactions. Under competition, such links arise as unpredictable results of decentralized selection. Unlike the plan system, which promotes uniformity of financial results across enterprises, competition promises widely varying outcomes, with winners receiving fat rewards and losers facing bankruptcy and unemployment. The power of competition arises from the lure of riches and the fear of oblivion, which motivate both prominent and obscure producers to scramble for advantage with a degree of intensity that plan systems rarely match.

Chapters 15, 16, and 19 summarize ongoing debate over the extent of competition and market integration. In our view, reform has pushed China's economy toward extraordinarily high levels of competition. Despite pockets of monopoly and episodic local trade barriers, intense competition now pervades everyday economic life. The auto sector provides a perfect illustration: two decades of competition have sucked a lethargic state-run oligopoly into a whirlwind of rivalries in which upstarts like Chery and Geely wrestle for market share with state-sector heavyweights and global titans. The payoff — rapid expansion of production, quality, variety, and productivity along with galloping price reductions — has injected a dynamic new sector (not just manufacture of vehicles, components, and materials, but also auto dealers, service stations, parking facilities, car racing, publications, motels, tourism, etc.) into China's economy.

Price wars and advertising, two unmistakable signs of competition, have become commonplace. Expenditures on advertising in 2006, estimated at RMB386.6 billion, now match total urban retail sales for 1990 (Advertising, 2006; Yearbook, 2006, p. 678). The decline of former industry leaders like Panda (televisions) and Kelon (home appliances) and the ascent of new pacesetters like Wahaha (beverages), Wanxiang (auto parts), and Haier (home appliances) from obscure beginnings show that competition has added new fluidity to Chinese market structures.

The growth of markets and the expansion of competition, mobility, and price flexibility invite participants to pursue financial gain by capitalizing on market opportunities. The strong response from both households and firms boosted economic performance, demonstrating the vitality of Adam Smith's "invisible hand" argument linking self-interested behavior with social benefits. Government agencies and political leaders also respond to reform-induced economic change, leading to a complex web of interaction between reform initiatives, economic developments, policy responses, and political strategies.

Mass migration now thought to involve 150–200 million persons epitomizes the impact of economic reform on household behavior. The demand for schooling illustrates another dimension of household responsiveness, in this case to the rising wage premium for workers with superior educational attainment (see Chapter 6). China's socialist period witnessed episodic vilification of intellectuals, who were denounced as a "stinking ninth category"; as noted earlier, education-related wage differentials shriveled during the 1960s and 1970s. Once the reform began, households, sensing new economic benefits for educated workers (and also reflecting historic cultural preferences), opted en masse to prolong their children's education despite policy changes that increased the share of costs paid by students and their families (see Chapter 7). Although China's public and private outlays on education may be too small (Heckman, 2003; Fleisher, Hu, and Li, 2006) or inappropriately tilted toward higher education, such marginal distortions represent second-order concerns. The main point is that the price system, however flawed, now provides Chinese households with sufficient information about wages and schooling costs to elicit sensible choices that expand human capital and improve future prospects for individual households and for the entire nation.

After hearing the head of a Shanghai factory explain his work, a visitor asked, "[S]o you just sit there and wait for instructions?" To which the director responded, "[Y]es, that's our job. The upper level issues plans, and we implement them." The manager of another Shanghai plant insisted that he had no information about the unit cost of the sewing machines produced on his assembly line. These episodes, which occurred in 1975 and 1982, would be impossible today, because Chinese firms have evolved from bureaucratic appendages to commercial operators that seek to enlarge strengths, remedy weaknesses, and capitalize on market opportunities.

Two recent developments have strengthened the responsiveness of Chinese firms. One is the growth of R&D spending, which reached 1.4 percent of GDP in 2006, and the shift of R&D activity from government agencies to enterprises, including many outside the state sector (see Chapter 9). The second is the growing influence of foreign firms, which elevates the risks associated with standpat business strategies, but also supports the efforts of domestic firms to generate a dynamic response to intense competition.

The auto sector provides an apt illustration: the rising domestic market shares and export achievements of Chery, Geely, Wanxiang, Fuyao, and other manufacturers of vehicles and components depend on interaction with foreign firms (e.g., for design services) and especially on access to the domestic supply networks established by the foreign partners of China's large-scale auto manufacturers.

The rapidity with which large and small innovations now migrate to China — e-commerce, text messaging, health clubs, organic foods, environmental awareness, flat-screen televisions, and so on — demonstrates the vitality of entrepreneurship in China's business sector. The current rush of international firms to establish China-based research and design facilities can only strengthen China's capacity for decentralized innovation — a hallmark of market systems.
KEY ELEMENTS IN THE POLITICAL ECONOMY OF CHINESE REFORM

We have discussed the key constituents of reform within China’s economy, but what of the policy process associated with these extraordinary changes? Despite the authoritarian nature of China’s political system, pre-reform policy structures allowed widespread experimentation and regional variation within broad guidelines set by the central leadership. This encouraged local officials to develop strategies whose success might attract high-level attention and also allowed national leaders to “play to the provinces” (Shirk, 1993) by assembling coalitions of like-minded officials to demonstrate the merits of their preferred policy options and to lobby for nationwide implementation of those policies.

This arrangement, under which national policies emphasized broad principles or parameters rather than specific instructions or regulations, continued into the reform period. What changed is the content of the principles articulated at the center, formerly directed toward ideological matters, which now focused increasingly on issues surrounding economic growth.

Looking beyond the principles emanating from the top, we see three additional elements as completing the skeleton of China’s reformist political economy. Decentralization endows provinces and localities with both the resources and the incentives to experiment with local approaches to specific policies (e.g., rural industrialization) and difficulties (e.g., how to deal with redundant state-sector workers), provided they observe central guidelines. Competition within the political system is not new, but now focuses with growing intensity on economic outcomes, which exercise increasing leverage over the career paths of leaders at every level. Continued promotion and recruitment of leaders whose reputation and career prospects rest on past and future economic success has gradually created a large and expanding coalition among growth-minded, market-oriented individuals and groups within China’s policy elite, whose power and influence help to shift the content of central guidelines in the direction of market outcomes.

Broad Guidelines – What They Can and Cannot Do

Chinese tradition emphasizes government of men (and, beginning in the late twentieth century, some women) rather than laws. There is no Chinese counterpart to the U.S. Federal Register, with its endless minute prescriptions. In the absence of detailed instructions, how do China’s top leaders direct the behavior of lower-level governments and individual officials? Functionaries at all levels must study and discuss the speeches and writings of top leaders, which lay out the desired course of public policy and explain what lower levels of officialdom should and should not do. These guidelines become encapsulated in catchy slogans that gain wide currency in official circles and also among the Chinese public. These slogans, and the policy guidelines that inform them, direct the flow of policy implementation at all levels. They tell both leaders and followers what to do and what to avoid.

From the start of China’s reform in the late 1970s, these directives increasingly emphasized economic matters. Indeed, China’s political economy has come to rest on a grand but unspoken bargain between the Communist Party and the Chinese public, in which the party ensures economic growth and promotes China’s global standing in return for public acquiescence to its autocratic rule and anachronistic ideology (Keller and Rawski, 2007). As a result, the articulation and fulfillment of key economic objectives now constitute core ingredients in extending the political legitimacy of the Chinese state. All Chinese officials and citizens learn about these publications, speeches, and slogans, which are not confined to internal government documents or the national press but reverberate at every level of society, where they become benchmarks against which the public can measure the propriety of current or proposed actions. Every Chinese knows Deng Xiaoping’s maxim “let some people get rich first.” Deng’s praise of reform during his southern tour of 1992 was widely seen as a favorable signal for policy innovations, including many that received no specific mention from Mr. Deng. In similar fashion, emphasis on (or omission of) praise for “small and medium enterprises” or “enterprise restructuring” will be interpreted as high-level encouragement of (or caution against) policies favoring private business or accelerated privatization of state enterprises.

Decentralized Experimentation

Twentieth-century experience surely qualifies the Chinese as the world’s leading practitioners of economic experimentation. China’s reform economy amply displays this penchant for experimentation at every level. We see the national government conducting trials of novel institutions, for example, “special economic zones,” while provinces and localities develop their own variations of the household responsibility system, township and village industries, the xianggang system of removing redundant workers from the state enterprise payrolls, and so on.

The decentralization of industry, which placed all but the largest enterprises under the control of lower-level governments, and China’s fiscal system, which, especially prior to the 1994 fiscal reforms, assigned major revenue streams to provincial and local administrations in both cities and the countryside (see Chapter 12), provided regional and local governments with ample resources with which to pursue such experimentation.

Successful experimentation can raise the visibility (and accelerate the career paths) of local leaders, who might become famous for their role in developing the “Wenzhou model” or the “Sunan model” of development. National leaders regularly conduct inspection tours in search of local experiments that demonstrate the merits of their own preferred policies and also to expand networks of supporters.

Political Competition

Prior to the inception of reform, China developed a tradition of policy entrepreneurship in which local figures compete for high-level attention by
demonstrating the beneficial implementation of the principles enshrined in broad central directives. This competition intensified under the reform, with GDP growth, exports, inflow of foreign investment, and other economic criteria replacing ideological benchmarks as the arbiters of success. Thus Li and Zhou (2005) find that promotion prospects for provincial leaders rise, and the likelihood of termination declines as provincial economic performance improves. Whiting (2001) makes similar observations about local officials.

Officials at all levels possess the authority as well as the resources needed to promote local growth. They also have strong incentives to do so, because their career prospects, as well as personal financial opportunities for themselves and their families, friends, and supporters, are closely tied to the economic trajectory of the jurisdictions under their leadership. Rapid local growth pushes local leaders to the head of the queues awaiting recognition, promotion, and bonuses. Growth also expands the pools of public revenue and enterprise profits over which officials exercise varying degrees of control, enlarges business opportunities available to the families and associates of local leaders, and swells the flow of (legal and illicit) rents directed toward official agencies and their managers.

These circumstances have transformed China’s local and provincial governments into eager champions of development, each striving to outdo its neighbors and rivals in expanding airports, highways, science parks, and telecommunications and in establishing firm foundations for local “pillar industries.” This competition contributes mightily to the persistent “investment hunger” visible in China’s economy, as local administrations resist central calls for restraint in enlarging existing facilities and building new ones.

This drive to excel in growthmanship, which has become embedded in government behavior at every level, distinguishes Chinese public administration from the conduct of (especially) local governments in many low-income nations, where local administrations often pay greater attention to supporting local elites or to extracting income from existing economic structures than to promoting growth.

Pro-Growth Coalition

China’s reform leaders, like politicians everywhere, endeavor to appoint and promote like-minded successors and subordinates. As Shirk (1993) and others have noted, the reform movement’s initial successes acted as a powerful recruiting device, with the lure of rich payoffs adding many influential converts to the cause of reform. As the reform gained momentum, the circulation of elites, including the recruitment or assignment of officials from high growth to less dynamic regions for the express purpose of jump-starting growth, created mentor–student relationships between growth-oriented officials and increased the number of would-be imitators. The widespread practice of sending study teams to absorb the “advanced experiences” of Shenzhen, Hangzhou, and other dynamic localities further expanded the reform constituency among China’s policy elites.

Of particular importance is the legacy of the Cultural Revolution, which severely truncated the educational opportunities available to whole cohorts of Chinese. This historical accident created a unique opportunity to advance the reform agenda. When the retirement of Deng Xiaoping and other “revolutionary elders” focused attention on generational change, reformist leaders managed to bypass the customary emphasis on seniority, skipping the “lost generation” of Cultural Revolution victims to promote younger candidates. Widespread replacement of 70-year-old retirees with much younger successors boosted reform advocacy in both government and party. The increasing share of university graduates, including returnees from overseas study and young professionals with close ties to international business, accelerated the development of what became a loose and unorganized but increasingly potent coalition of like-minded officials whose objectives centered on growth-promoting and increasingly market-oriented reforms.

Despite these gains, the evolution of policy toward private business demonstrates the difficulty of translating power and influence into genuine institutional change. Although China’s reform quickly removed barriers to the existence of private business, Haggard and Huang (see Chapter 10) observe no steady increase in official encouragement and support for the private sector; indeed, they find that such support actually eroded during the 1990s.

Legal documents confirm the painfully slow expansion of official protection. At the start of reform, private business operated in a legal limbo. Some entrepreneurs disguised their firms as collectives, thus gaining the shelter of a “red hat” that falsely signified public rather than private ownership; others purchased informal protection from powerful individuals or agencies. A succession of amendments to China’s 1982 constitution slowly expanded recognition of the nonpublic economy, first as a “complement” to the state sector (1988) and then as an “important component” (1999) of the “socialist market economy” (itself a new term dating from 1993). The “Law on Solely Funded Enterprises,” which took effect in 2000, guarantees state protection for the “legitimate property” of such firms, but without using the term “private” or specifying any agency or process to implement this guarantee.

Further constitutional amendments adopted in 2004 breached the former taboo on the term “private” by stating that “citizens’ lawful private property is inviolable.” The long march toward official recognition of private business came to an end only in 2007 when, following five years of fierce debate, China’s legislature enacted a landmark Law on Property Rights which, for the first time, explicitly places privately held assets on an equal footing with state and collective property.

China’s treatment of the state-owned sector has followed a comparable path of slow progress cumulating in revolutionary change. In 1978, the state sector accounted for 77.6 percent of industrial production and 51.8 percent of nonfarm employment (Compendium, 2005, p. 46; see Table 17.1). Chen Yun captured the essence of early reform thinking when he likened the economy to a “bird” in a “cage” (meaning the plan) and proposed that expanding the cage would improve the bird’s
capacity for flight. Chinese economists began to think of shifting state firms toward commercial management, a trend captured by the slogan "separate government from the enterprises" (zhengqig fenkai) and by new terminology describing SOEs as "owned" rather than "operated" by the state (guoyou vs. guoying). Regulations on the state enterprise operation, issued in 1992, invested SOE managers with wide authority (at least in principle) to hire and dismiss workers, set wages, and conduct transactions involving enterprise assets.

Following the adoption of "socialist market economy" as a national objective, Chinese sources began to identify "competitive" industries where the state had no strategic interest, so that market processes could be allowed free rein. As a result, competition has virtually eliminated state ownership from sectors like apparel and the construction industry's share in industrial output and nonfarm employment had declined to 15.2 and 13.1 percent; the number of state enterprises in all sectors declined by 177,700 between 2001 and 2004 (State Council Economic Census Group, 2005; Yearbook, 2006, p. 505; see Table 17.1). As reform completes its third decade, we anticipate further privatization, with China's future state sector limited to several dozen large, centrally controlled firms, some with partial foreign (or possibly private domestic) ownership.

CONCLUSION

Starting with the restoration of household agriculture in the late 1970s, China has implemented a long sequence of increasingly coherent, focused, but still partial, gradual, and as yet unfinished economic reforms. Chinese policy has eschewed the "big bang" approach, in part because political realities have repeatedly frustrated ambitious reform proposals (e.g., by Wu Jinglian and Dong Fureng regarding SOE reform during the 1990s; see also Chapters 4 and 10). With hindsight, we also know that China's economy lacked some of the institutional underpinnings essential to the success of sweeping reforms; for example, the undeveloped state of domestic markets for capital and ownership rights might have derailed an early push for privatization.

China's reforms consistently focused on what we have described as "big issues" of incentives, mobility, price flexibility, competition, and openness. China's experience, as well as the record of earlier growth spurts in Japan and Korea, shows that improvements in these areas can power strong economic advance despite the costs and frictions associated with institutional shortcomings, distorted prices, entry barriers, corruption, and other limitations. We attribute China's recent economic gains to the success of reform in activating these key elements in the economy.

The consequences of this partial but effective reform campaign include the following:

- Massive expansion of China's economy, which now trails only the United States in absolute size (measured at purchasing-power parity).
- Universal increases in living standards that have elevated hundreds of millions from absolute poverty.
- A new expansion path on which productivity, innovation, and R&D now contribute substantially to overall growth.
- A major shift from plan to market, which coexists with vigorous government activism of the sort familiar from the high-growth era in Japan and Korea.
- Intense competition in most sectors despite substantial (but shrinking) areas in which official direction remains strong.
- Rapid structural change from rural/agricultural to urban/nonagricultural, from isolation to growing integration with global markets, and from public to mixed (and increasingly, to private) ownership.

In the wake of these remarkable advances, three decades of reform have reshaped China's economy into a hybrid that is increasingly responsive to domestic and international market forces, even though some segments, for example, capital markets and investment spending, reflect the continued legacy of planning. While reform has unleashed enormous growth, its uneven nature has left a penumbra of weakness and imbalance.

Institutional change has lagged behind the growth of material progress from the start. Creative improvisation has repeatedly bridged institutional gaps. Townships and village enterprises, odd creatures that combined elements of public and private enterprise, delivered big increases in output, employment, and exports for about 15 years before undergoing rapid privatization during the 1990s. The xiagang system of partial layoffs lessened the impact of mass unemployment during the decade spanning the turn of the century.

Heston and Sicular observe that development in China, as in other large nations, creates painful imbalances among regions (see Chapter 2). Such differences may be inevitable, but Chinese policy has surely amplified the coast–interior gap in a number of ways, including uniquely favorable legal and regulatory arrangements for coastal regions already favored by geography and culture as well as slow removal of barriers that limit the flow of benefits to interior regions and their inhabitants.

Focusing on big reforms has left a trail of unfinished business. Although the costs associated with incomplete or delayed reforms pale in comparison with the benefits of unleashing the economic energies of 1.3 billion Chinese, these costs are both real and very large. Some are remnants of the plan era, for example, the underpricing of energy, water, and bank loans, which exacerbates China's environmental and employment problems. Some stem from the reform itself, for instance,
the continuing epidemic of rent seeking and graft. Others, including the consequences linked to weak systems of environmental management, law, public finance, banking, and investment allocation (see Chapters 8, 10, 11, 12, 14, and 20), reflect halfway houses that combine inherited political and economic structures with partial reform efforts.

Such fusion of historic legacies and subsequent reform attempts is nowhere clearer than in the complex interaction between efforts to energize the state sector and the broader process of national development. Contributions of capital, technological expertise, and export earnings from the state sector figured prominently in early post-reform economic gains when state firms occupied large segments of China's nonfarm economy. The beneficial legacy of plan-era institutions devoted to nurturing technology and high-level skills remains visible even today (see Chapter 15).

Despite these benefits and the rapid decline in the state sector's share in economic activity, it is increasingly evident that state ownership acts as a major drag on China's economy. Both national and provincial data link state ownership with retarded growth, low capital productivity, slow transfer of labor out of farming, and many other undesirable phenomena (see Chapter 17). The basic difficulty is that political leverage equips state enterprises with privileged access to investment funds, which they (on average) deploy unwisely. This incites a double burden on local economies, which suffer from the poor investment choices that bedevil the state sector and also from the crowding out of more dynamic nonstate firms.

The conclusion that big reforms involving incentives, mobility, prices, competition, and openness have propelled China's boom in spite of myriad shortcomings and inefficiencies provides no basis for celebrating defective institutions, policy failures, or distorted prices. To the contrary, these and other difficulties retard growth and increase its cost, to the particular disadvantage of tens of millions who, despite astonishing economic gains at the national level, still languish in poverty or unemployment. They also threaten the economy's forward momentum and therefore command the attention of China's policy elite.

China's recent experience confirms our belief that economic outcomes are not foreordained. Neither domestic nor overseas observers (including the present authors) anticipated China's great economic transformation of the past three decades. The success of partial, gradual reform in unleashing China's extended economic boom does not ensure that similar policies would have comparable effects in different settings. Nor does China's prosperity demonstrate that "Chinese" policies would have avoided the painful drop in output that accompanied initial reform efforts in the former Soviet Union and Eastern Europe (see Chapter 3).

Historical legacies and particular circumstances figure prominently in the story of China's protracted boom. Not every economy can jump-start growth by exploiting a wide gap between current and potential output. Few low-income nations can equal China's standard of administrative competence. Perhaps none will match the good fortune that endowed China with the extraordinary synergy from the marriage between domestic labor and the capital and knowledge of overseas Chinese entrepreneurs.

The conditions of Chinese "path dependence" were not uniformly favorable. China's reforms had to overcome troublesome legacies of socialism, including considerable erosion of the work ethic, decades of antimarket propaganda, and the "lost generation" whose education disintegrated amid the disturbances of the Cultural Revolution. As a large country, China forfeited the luxury of expanding its role in global trade "under the radar" of intense political scrutiny: many potential partners erected barriers to Chinese exports before agreeing to commence "normal" trade.

The historical experience of Great Britain, Argentina, Brazil, Japan, and, indeed, China itself demonstrate that past success cannot ensure future prosperity. Because bad institutions and poorly conceived policies can result in "growing into trouble" (Doner and Ramsey, 2004), such weaknesses are no mere footnotes to China's remarkable boom, but rather danger signals on the path ahead. China's rickety fiscal system poses a major obstacle to continued growth (see Chapter 12). Continued distortion of capital markets to favor state enterprises undermines efforts to accelerate the painfully slow expansion of employment and raises the likelihood of financial crisis. Insufficient rural education due to a combination of income inequality and fiscal neglect could fuel future problems of structural unemployment.

Despite these and other difficulties, Perkins and Rawski anticipate that China's economy can achieve real GDP growth at average rates of 6–8 percent per annum between 2005 and 2025 (see Chapter 20). Whatever the outcome, China's economic progress since the start of reforms in the late 1970s ensures that the world's appetite for information and analysis about China's economy will continue to grow. Despite limited coverage of monetary policy, transportation, enterprise management, and other important subjects, the essays that follow provide a rich tapestry of information and analysis that expands the foundation on which future research can build.

References

We view development economics as a set of empirical generalizations, paradigms, and tools that tell us something about why large differences in productivity and income within and among countries, social groups, and classes seem to persist. How does China fit into the received views of development economics? In answering this question the cup overfloweth with materials, so no attempt is made to be exhaustive. We begin in Part A by using comparative statistics of developing and developed countries to help understand China's present position and its growth experience since 1978. Ensuing sections take up selected topics where development economics and China's development experience intersect. Part B looks at governance issues in a comparative framework, focusing on corruption as a phenomenon that brings together many features of administration that are common across countries. Part C examines the rural sector, focusing on agricultural productivity and land tenure, and Part D reviews the uniquely East Asian phenomenon of rural industrialization. Part E concludes.

**CHINA'S COMPARATIVE ECONOMIC PERFORMANCE: A QUANTITATIVE LOOK**

How do China's economic performance and structure compare to those of other developing countries? In this section we situate China within the developing world, using comparative measures that are in some cases straightforward and in others somewhat controversial. Jan Svejnar's contribution (see Chapter 3) to this volume contains tables allowing similar comparisons with the transition economies. Variables examined include demographic, environmental, and energy indicators, economic data from national income and product accounts, Gini coefficients and related distributional measures, and selected human capital information.

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1 University of Pennsylvania and University of Western Ontario. The authors thank Loren Brandt and Tom Rawski for useful suggestions on earlier drafts.