China: Facing the 21st Century

As 1997 drew to a close, economic czar Zhu Rongji considered the economic and political challenges that China would face in the next decade. It had been a tumultuous year. Long-time paramount leader Deng Xiaoping had died in February, trade tensions with the United States escalated when the U.S. blocked China's membership in the World Trade Organization (WTO), and a series of currency crises in Asia threatened regional recession and the competitiveness of Chinese exports. Perhaps most important, there was widespread concern that China's vigorous growth was threatened by several long-neglected issues. Should China alter its development strategy, especially in light of the leadership change?

Since Deng had initiated China's program of economic reform in 1978, China had experienced a stunning transformation. GDP had grown at a 9.5% annual rate, per capita income had more than quadrupled, foreign direct investment had boomed, and trade had increased from 10% to 45% of GDP—making China the world's seventh-largest exporter.[1] Although per capita GDP was still only $600 when measured at official exchange rates, China's economy had become the world's third-largest when adjusted for purchasing power.[2] Most observers were awed by the magnitude of the transformation; the World Bank referred to the reforms as "spectacularly successful."[3]

Deng's death had settled a long-simmering dispute over succession for the top positions of the Communist party and the country. After seven years of grooming, President Jiang Zemin, Zhu's patron and a cautious reformer, had emerged as the top leader. Zhu was currently number three in the hierarchy and was expected to become the prime minister when the current prime minister, Li Peng, retired in March 1998.

Deng's death and the political ascendancy of the reformers provided an opportunity to reassess China's economic strategy. Deng's primary goals had been political stability and rapid economic growth. But the focus on short-term growth had left many issues unaddressed. Losses at state-owned enterprises and banks were growing, posing a potential threat to China's fiscal health. Trade tensions with the United States were increasing on both political and economic fronts. The Communist party's political legitimacy was threatened by corruption and a shift of power to the provinces. Pollution was a growing danger to public health. Finally, and perhaps most threatening in the long run, China's market institutions remained underdeveloped.

As economic czar, Zhu was charged with addressing these issues. He was inclined to think strategically, but radical action would be difficult. Nearly everyone agreed that China had great economic potential, but that potential might remain unrealized unless Zhu found a way to address the factors that threatened long-term growth.

Professor Robert E. Kennedy and Research Associate Katherine Marquis prepared this case as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation. We are grateful for substantial input from Professor Yasheng Huang and Research Associate Teresita Ramos.

Historical Background

Dynastic China China claims one of the longest histories of any civilization, dating from at least 2200 BC, when farming clans began to form in the Yellow River valley. Central government first arose in approximately 1120 BC, when the Zhou clan established control over the Yellow River valley. The Zhou ruled the region until 480 BC, when China splintered during the Warring States period (480 BC - 221 BC). During this period, Confucius, one of China's greatest philosopher-sages, tried to convince the rulers of the virtues of order and the ways of maintaining it. China's first emperor, Qin Shi Huang, unified the country in 221 BC, creating its first dynasty. Qin is credited with laying the foundation for the birth of the Chinese state. He standardized the Chinese currency, weights and measures, and the written language. He also created a national army and established a centralized political apparatus that ruled much of China's present territory. Qin died in 210 BC and his empire quickly disintegrated. Following Qin, China was ruled by a series of dynasties that all used the imperial system he created. Confucianism became the official state ideology under the Han dynasty (206 BC - 220 AD).

Three basic pillars sustained China's imperial system. The first was the emperor, who sat at the pinnacle of power and enjoyed the "Mandate of Heaven." This mandate gave the emperor the divine right to rule, but was contingent upon good conduct. Chinese history contains many examples of peasants rising against an emperor whose conduct was perceived as a sign that he had lost the mandate of heaven. The second pillar was the imperial bureaucracy. The Chinese invented the art of bureaucracy, along with sophisticated procedures to reward, monitor, and control these bureaucrats. The bureaucracy was selected using arduous, multi-tiered and multi-year civil service examinations, which were quite well developed by the seventh century.[*] The third pillar was Confucianism, a philosophy that stressed three bonds: between subject and ruler, between son and father, and between husband and wife. The idea was that rulers should govern their countries as patriarchs governed a family. This moralistic approach had a profound impact on the development of Chinese political institutions and has influenced China through modern times. Because it viewed the rulers as moral beings, Confucianism downplayed the need to create institutions to "check and balance" the ambition of rulers. Confucianism's view of society as a network of relationships also led to the practice of *guanxi*, the cultivation of relationships to help make one's way in the world, which was still important in contemporary China.

Dynastic China has been credited with some of the world's greatest technological inventions. The Chinese invented paper, printing, the compass, iron casting, mechanical clocks, and gunpowder, in each case centuries before these items were introduced in the West. In addition to its technological lead, imperial China seemed to have many of the ingredients required for rapid development. The currency was unified, production was quite specialized, and the cities housed great markets. Thus, China's subsequent economic stagnation was one of the great paradoxes of economic history. As historian R. H. Tawney commented, Chinese peasants "ploughed with iron when Europe used wood, and continued to plough with it when Europe used steel."[4]

China's last dynasty, the Qing (1644-1911), collapsed under both internal and external forces. Probably the single most important internal factor was the unprecedented population growth between the mid-eighteenth and mid-nineteenth centuries, when China's population increased from 143 million to 423 million. This growth strained food supplies and led to widespread malnutrition. In addition, the dynasty refused to allow the bureaucracy to grow along with the population. This increased the competition for coveted civil service positions, leading to bribery and corruption that ultimately undermined the imperial examination system.[5]

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[*] There were three rounds of qualifying examinations: one at the county level, one at the prefectural level, and then the qualifying examination itself. The actual examination then was offered at three levels—in the provincial capitals, in Beijing, and then at the imperial palace. Typically, a man started preparing for these examinations at the age of seven and, if successful, finished all of them around the age of 35.

A second important factor was Western penetration of China starting in the nineteenth century. The first opium war with the British (1839-1842) led to the Treaty of Nanking, signed in 1842. The treaty forced China to open five port cities to British trade, ceded Hong Kong to the British, established extraterritoriality (where foreign nationals were exempted from Chinese law), and surrendered substantial economic sovereignty to foreigners. The treaties undermined the legitimacy of the Qing emperor and inspired Chinese nationalism against the Manchu regime.* The dynasty was overthrown in 1911 by the army in the hinterland city of Wuchang. Given the enormity of the event, the mutiny was relatively small, involving only a few thousand soldiers and was largely nonviolent.

The Republican Era After the demise of the Qing, the country descended into chaos. Regional warlords established fiefdoms throughout the country and the central government became inoperative. Throughout the 1910s, the warlords fought among themselves while Chinese intellectuals debated what direction the country should move. This changed abruptly when the Versailles Peace Conference, which brought World War I to a close, awarded German holdings in China's Shangdong province to Japan instead of returning them to China. Students in Beijing rioted, burning down government buildings and assaulting the Japanese ambassador. The riots soon spread and brought the country to a standstill. The riots, which came to be known as the "May Fourth Incident," introduced a new form of violent "mass politics" to China.[6]

Two broad political efforts emerged from the May Fourth Movement: the Guomindang (GMD), a nationalist party that had been founded by anti-imperial revolutionaries; and the Chinese Communist Party (CCP), founded by leftist students, academics, and other urban intellectuals. In the early 1920s, the GMD gained control of several southern provinces, most notably Guangdong. The CCP had a following in the cities, but did not control any provinces. Both groups had close ties to the Soviet Union, which convinced them to join forces in 1924 in an effort to reunify the country.

GMD/CCP cooperation ended in 1927 when GMD leader Chiang Kai-shek launched a surprise attack that killed nearly 90% of the CCP's members. The surviving Communists fled to the rural areas in the south and began building support among the peasantry. Between 1927 and 1934, the CCP rebuilt itself as a rural party. It was during this period that Mao Zedong, a young peasant from the central province of Hunan, developed his thinking on four crucial issues: land reform, how to develop and sustain political activity among peasants, how to govern territory under the CCP's control, and how to use military force effectively in the countryside. In 1927, Mao wrote that peasants' "political activity tends to rise up like a storm that unleashes tremendous violence and passion, but then quickly exhausts itself."[7] This view shaped Mao's political thinking until his death, and did much to change modern China.

The Communists were eventually forced to move north in the fantastic "Long March" from Jiangxi to Shaanxi, a year-long trek that took them through vast reaches of inhospitable terrain. More than 80% of the marchers died and, for decades, participation in the Long March was a powerful legitimizing force for surviving political leaders.

External events again intruded when Japan invaded China in 1931. The Japanese occupation prompted a second alliance between the GMD and CCP that lasted until the early 1940s. The CCP remained in the northern provinces while the GMD retreated to China's southwest. When the Allied Forces defeated Japan, the United States recognized the GMD as the legitimate government of China and airlifted GMD officials to China's leading cities. Chiang launched another effort to exterminate the CCP in the winter of 1946, prompting a full-scale civil war. By late 1949, the CCP had routed the GMD, which fled to Taiwan. On October 1, 1949, Mao stood atop the Tiananmen "Gate of Heavenly Peace" and proclaimed the formation of the People's Republic of China.

* The Qing emperors were ethnically Manchu, a tribe that had traditionally been on the fringe of Chinese civilization and outside China proper. For that reason, the manchu dynasty was never fully accepted by the Han Chinese—the ethnically dominant racial group—even though the Manchus were completely absorbed into Chinese culture.

The Maoist Era When the CCP came to power, China had been in decline for nearly a century, and by one estimate, since 1400.[*] Between 1949 and his death in 1976, Mao directed a radical transformation of the country. He appears to have been driven by two goals: achieving a peasant-led socialist revolution and rapid economic development. As his focus shifted from one goal to the other, policy followed, often abruptly. The Maoist period can be divided into four eras: political consolidation and economic reconstruction (1949-1957); the Great Leap Forward (1958-1960); economic recovery (1961-1965); and the Cultural Revolution (1966-1976).

After expelling the GMD to Taiwan, Mao moved quickly to establish political control and rebuild the economy. He deployed the People's Liberation Army throughout the country and set up provincial governments under CCP control. He also targeted potential opponents with mass political campaigns. These included land reform (which targeted land-owners and rich peasants), the "Suppression of Counterrevolutionaries" campaign (former GMD officials), the "Thought Reform of Intellectuals" campaign (non-CCP intellectuals), and the "Anti-Rightist" campaign (intellectuals and some party officials). These campaigns employed the techniques Mao had developed in the countryside, including mass action, violence, and forced public "confessions." During the period of consolidation, the CCP looked to the Soviet Union for guidance on how to rebuild the economy. Thus, the first five-year plan (1953-1957) emphasized central planning, capital accumulation, and investment in heavy industry. The strategy led to GDP growth of nearly nine percent[†] and by 1957 Mao had consolidated his power.

Mao became increasingly disillusioned with Soviet guidance in the late-1950s and sought to establish a distinctive Chinese approach to development. He was particularly incensed by a 1956 speech in which Soviet Premier Nikita Khrushchev attacked Joseph Stalin's legacy, cautioning against granting too much power to a willful leader. As Mao searched for another approach, he became convinced that mass action by the peasantry would allow China to leap over the normal stages of economic development. This led to a program referred to as the "Great Leap Forward." Land that had been distributed to peasants was reclaimed and granted to rural communes. Communes were directed to mobilize peasants in order to increase agricultural production, build rural infrastructure, and establish an industrial base in the countryside—with a special emphasis on steel production. Ambitious targets were set and initial reports from the countryside were promising. More than a million "backyard" iron smelters were constructed in the first year and the state statistical bureau claimed that the production of food and cotton doubled. But the gains were largely fictitious. Local officials, eager to report that the masses had responded enthusiastically to the program, falsified production figures. Most steel was of such low quality that it could not be used. But this was not apparent to the planners, who instructed the communes to shift more labor from farming to industry. Agricultural output plummeted and 20 million-30 million people—mostly the elderly and people in poor health—starved to death. Kenneth Lieberthal, a well-known political scientist, observed that the Great Leap was "in the final analysis, a tremendous, willful leap away from reality."[8]

As the extent of the Great Leap disaster became clear,[‡] Mao quietly shifted strategies. He withdrew from day-to-day decision making and recalled the country's well-trained bureaucracy. Mao's longtime lieutenant, Deng Xiaoping, was asked to stabilize the economy. Deng quickly reversed much of the Great Leap—breaking communes into smaller units, reorganizing economic reporting, bringing back technical experts, and forcing peasants to return to farming. The economy quickly recovered and, by 1965, output had returned to pre-Great Leap levels.

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* In 1820, China had been the world's largest economy, with a 30% share of world GDP. By 1950, its share had fallen to only 7%. A. Maddison, *Monitoring the World Economy* (Paris: OECD, 1995). Elsewhere, Maddison (1991) estimates that China's per-capita GDP declined from $500 in 1400 to $454 in 1950, measured in constant 1985 prices.

† During the first five-year plan, national income grew at an 8.9% annual rate and agricultural output grew by 3.8%. Fairbank, p. 358. Maddison (1991) estimates that this growth was due almost entirely to capital accumulation. The capital stock grew at an annual rate of 9.2% between 1950 and 1973, while total factor productivity grew by only 0.49%.

‡ Estimates put the GDP decline at more than 30%, approximately the same decline experienced in the United States during the Great Depression. See Fairbank and Reischauer, *China: Tradition and Transformation*, p. 500.

Mao apparently found it difficult to remain in the background. He grew increasingly suspicious of the government bureaucracy and of intellectuals in the CCP, whom he suspected were exploiting the countryside, just as the imperial elites had done. Mao launched a stunning attack on the establishment in 1966, declaring a Cultural Revolution to "destroy the old and establish the new." His goal was to rekindle the spirit of the Long March, throwing China into a state of permanent revolution. Mao encouraged youthful Red Guards to destroy the "four olds" (e.g., old ideas, old culture, old customs, and old habits). In practice, this meant widespread beatings, denunciations and mob-instigated "trials." Red Guards roamed the country attacking establishment elites, including government officials, managers, intellectuals, and former members of the bourgeois class. Even high government officials were not immune; Mao denounced Deng Xiaoping, and he was "sent down" to the countryside. Deng's son was permanently disabled when he was thrown out of a window by Red Guards.

China turned inward during this period. All ambassadors were recalled from abroad, and students attacked the British, Soviet, and Indonesian embassies. Mao eventually realized that the Cultural Revolution had spun out of control and ordered the army to reestablish control in 1969. The violence continued sporadically, especially in the countryside. When Mao began to experience health problems in the early 1970s, political infighting between "moderates" (headed by Zhou Enlai) and "radicals" (led by Mao's wife, Jiang Qing) took center stage. Deng was rehabilitated in 1973 and became the leading moderate when Zhou died in January 1976. Mao died on September 9, 1976. After a two-year struggle between the rival camps, Deng emerged as the paramount leader in mid-1978.

Institutions of Social Control The CCP exercised a tremendous degree of control over the Chinese population, primarily though four layers of administration: the central government, provinces, local authorities (either counties or cities), and "units" (*danwei*). Although the economy was centrally planned, it was less rigidly hierarchical than in the Soviet Union. The central government set broad goals, but allowed the provinces and local authorities a high degree of autonomy regarding how to reach these goals. Political control was tight, however, and the locus of this control was the unit. All citizens were required to belong to a unit. For most, the unit was their employer; for students it was their school; and for farmers, their commune. The *danwei* were multi-purpose bodies. They were responsible for providing housing, primary and secondary schooling, pensions, and ration coupons for food, clothing, and furniture. The units also administered birth control programs, approved marriages and divorces, and resolved personal disputes. The key to the unit's importance was that few individuals were given permission to transfer from one unit to another. Workers were guaranteed lifetime employment, but were not free to switch jobs or move to another city. Each unit, even within cities, was an isolated political and social organization, with little communication between members of different units.

The Era of Economic Reform

Compared to the upheaval China had experienced since 1949, the situation that Deng inherited in 1978 was relatively stable. The moderate faction of the CCP had gained control of the party but did not enjoy the unchecked power that Mao had possessed. Political interactions between the reformers and hard-liners would dictate the pace and thrusts of the reform effort throughout the 1980s. Deng was wary of political manipulation and mass upheaval and shifted away from ideological exhortations, using material incentives instead. His strategy involved two simple principles: "reform measures were legitimate if they promoted rapid economic growth and if they did not weaken the Party's control of the political system [and]; everything else was subject to compromise."[9] Deng was known for his pragmatism, perhaps best summed up in his slogan "Who cares if a cat is black or white, as long as it catches mice." In practice, this meant both the marketization and internationalization of the economy. Deng also moved to depoliticize society, creating a sphere of private activity beyond the reach of politics. But political reform was relative. There would be no move toward democracy and the CCP would retain its monopoly on power.

While the economy had stabilized, Deng still faced a great challenge. China territory was nearly identical to that of the United States, but it had four times the population and just one-quarter of the arable land with which to feed them.[10] Eighty-two percent of the population lived in rural areas, but rural incomes had been stagnant for more than a decade. The Great Leap and Cultural Revolution had inflicted lasting damage on the economy,[*] and more than 60% of the population lived on less than one dollar a day, the international poverty line. There was no rule of law in the Western sense.[11] Famine was an ever-present concern—mass starvation had occurred just 15 years before and population growth had outstripped grain production since the early 1950s.[12] Still, China did have several factors working in its favor. Its workforce was skilled and disciplined. Millions of overseas Chinese were willing to trade with and invest in China. And China's neighbors in Asia had demonstrated the potential for high growth.

One of Deng's first steps was to tighten controls on population growth. The country had long been the most populous in the world, and opinion among the leadership was divided about whether this was a national asset or liability. Mao had considered a large population an asset, as "every person added two more hands to work." During the first 20 years of the People's Republic, no effort was made to restrict births, and the birth rate was consistently above 30 per thousand population. Zhou Enlai had come to believe that controlling population growth was a precondition for economic development and had initiated a two-child policy in 1971—with the goal of reducing the birth rate to 20 per thousand by 1980. The campaign's slogan was "late, sparse, and few."[13] Zhou's policy had limited success, as the birth rate declined to 23 per thousand by 1975. Deng launched a one-child policy in 1978. Women were required to obtain permission to have more than one child, with monitoring and enforcement provided by the units. A variety of rewards and punishments were used to enforce the policy, including subsidies, social sanctions, destruction of property, and occasionally, forced abortions. The program was fairly successful in the cities, where the average number of children declined to one per family. The program was, however, fiercely resisted in the countryside where the average number of children was still 2.3 per family. In an effort to maintain social peace, the government relaxed the one-child policy where resistance was greatest. Ethnic minorities were exempted, and most counties granted permission for a second child if the first was a girl.

While Deng was clearly responsible for the economic reforms initiated since 1978, only a few policies were imposed from the center. Beijing, with the support of the Peoples Liberation Army, was responsible for maintaining political stability. Further, the high savings rate and exchange rate policy were also due to central government policies. Most other reforms bubbled up from below. Deng created space for experimentation and local officials responded enthusiastically. Successful innovations were duplicated and eventually endorsed by the central government; unsuccessful experiments were discarded. The reforms can be divided into four broad categories. These were rural reform, trade and investment reform, SOE/urban reform, and institutional reform.

Reform in the Countryside The first wave of reforms took place in the countryside. In 1978, most peasants still lived in rural communes and were instructed to produce fixed quantities of agricultural products to meet the plan. In some areas, local officials had begun to allow peasants to retain production above their contracted amount and often looked the other way when this production was sold on local markets. Prompted by officials in drought-ravaged provinces, Deng undertook several measures to increase crop production and raise rural incomes. He instructed local officials to increase procurement prices for central plan quotas and to allow above-quota output to be freely sold.[14] This created a "dual price" system, in which a fixed amount of output was delivered to meet the plan and all incremental output was sold at market-determined prices. Deng also increased state investment in agriculture and relaxed restrictions on interprovincial trade in agricultural products.[15]

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[*] One study estimates that the damage done by the GLF and Cultural Revolution had reduced China's 1978 GDP by at least 50%. G. Chow and Y. Kwan, 1996, "Estimating Economic Effects of the Political Movements in China," *Journal of Comparative Economics* 23(2): 192-208.

A related innovation was the "Household Responsibility System." Although officially prohibited by the central government, many communes began to lease plots of land to individual households. As payment, the family was responsible for managing production and delivering a fixed quota of output to the commune. The system shifted control of production decisions from communes to households, and thus led to very different behavior. The Household Responsibility System spread quickly after 1979. In 1981, when the central government officially approved the system, 45% of rural households were already participating. By 1983, the system had spread to 98% of farming households.

The reforms had an immediate impact and production of all types jumped sharply. The most rapid gains in agricultural output occurred between 1978 and 1984, when grain yields grew at a 5.7% rate, the production of oilseeds doubled, and cotton output tripled.[16] Pork, beef, and mutton production all grew by at least 80%.[17] After 1984, growth slowed to its long-term average of about 2%.

The changes in the countryside led to a virtuous cycle. Increased production and procurement prices raised rural incomes and led to a sharp increase in savings.* Higher incomes created demand for consumer goods that were in short supply. To meet this demand, local governments began to direct savings into collectively-owned firms, known as "Township and Village Enterprises," many of which were actually established during the Great Leap Forward to promote rural industrialization.† Increases in agricultural productivity freed up surplus labor in the countryside.‡ Industrial output in the countryside boomed. By the time the central government officially approved rural industrial development in 1984, Township and Village Enterprises' share of industrial output had grown from 22% to 30%. It grew to 36% in 1988, and has stayed at about that level since. Throughout the 1980s, TVE output grew at an average rate of 30% a year.[18] By 1995, 23 million TVEs employed 129 million people.[19]

Trade and Investment Reforms China's self-imposed isolation during the Cultural Revolution had come at a time when other Asian economies were taking off. Hong Kong, Japan, Singapore, South Korea, and Taiwan had all combined technology imports with export promotion to drive rapid growth. Deng believed a similar strategy would work for China, but the country had a long way to go. The economy was extremely isolated, with a trade to GDP ratio of only 10% and no stock of foreign direct investment. Internationalization was also needed for less philosophical reasons. Reform in the countryside had led to strong demand for imports, primarily fertilizer and capital equipment, and foreign exchange reserves had fallen dangerously low. Despite these factors, internationalization proved to be quite controversial. Hard-liners resisted because of worries about foreign influence.

As with other elements of Deng's reforms, events quickly overtook the planners' deliberations and reform proceeded along three distinct paths. The first was piecemeal trade reform, which started in 1979 and continued through the mid-1990s. Prior to 1979, all trade had flowed through 12 foreign trade corporations (FTCs). After that, local officials started to license their own FTCs and allowed local firms to bypass central government FTCs. By 1988, the number of registered FTCs had grown to 5,075. In addition, the number of domestic firms with foreign trade rights mushroomed, reaching nearly 10,000 in the mid-1990s.[20] In the early 1980s, the central government also began a slow reduction in import tariffs, but many nontariff barriers remained.[21]

The liberalization of foreign direct investment (FDI) was much more controversial than trade reform. Neighboring high-growth countries had pursued different strategies with regard to FDI. Foreign direct investment had played an important role in Hong Kong and Singapore, but little role in

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* The annual rural household income increased from 133.6 yuan in 1978 to 397.6 yuan in 1985. Gross savings by rural households increased from 55.7 billion yuan to 438.1bn between 1978 and 1984. China Statistical Bureau.

† Most TVEs were owned by rural *danwei* (units) and enjoyed much more freedom than SOEs. They could generally produce anything they chose, within geographical limits, and retained their own earnings. After the disastrous experience during the Great Leap Forward, most TVEs produced agricultural equiment and simple manufactured products.

‡ By the mid-1980s, more than 100 million adults had given up farming and were working in villages and townships across China. Lieberthal, p. 148.

Japan and South Korea. FDI troubled hard-liners because it involved much closer foreign ties than simple trade. To the hardliners, foreign investment implied foreign control of Chinese assets and a dilution of the socialist character of the economy. Given China's history, this was an especially sensitive issue. A compromise was reached where foreign investment would be restricted to just a few geographic areas, thereby isolating foreigners' influence while the costs and benefits of FDI could be studied. Four coastal cities were designated Special Economic Zones in 1980 and granted permission to experiment with new institutions, such as tax rates and approval procedures for foreign investment.* Enterprises operating in the Special Economic Zones were exempted from the central plan, labor regulations, and many taxes.†

A third set of reforms involved foreign currency. The inflation-adjusted (i.e., "real") value of the yuan was steadily lowered, starting in 1980 and continuing through 1993. Several microeconomic reforms were also implemented. Until the mid-1980s, foreign currency transactions were tightly regulated. All capital transactions required central bank approval, while the treatment of trade transactions varied according to firm ownership. Enterprises with foreign capital that were located in Special Economic Zones were generally allowed to retain foreign currency and to import and export freely. Domestic firms required regulatory approval and foreign-currency allowances to import and were forced to turn over all export earnings to the state banking system. In the mid-1980s, the government introduced a complex system in which domestic firms could retain a portion of the foreign exchange they generated. In 1986, the government introduced a dual exchange rate system on which domestic firms could buy and sell limited amounts of foreign currency (this will be discussed in greater detail below).

The reforms led to a dramatic transformation of China's links to the outside world. Merchandise exports grew from $11 billion in 1978 to $24 billion in 1984, a 14% growth rate. By 1996, exports had reached $154 billion. During this same period, exports increased from 4.9% to 18% of GDP. The response to liberalization of FDI was much slower. Foreign direct investment flows grew from $57 million in 1980 to $2.7 billion in 1990. It exploded after 1993, jumping from $7.2 billion in 1992 to $42 billion in 1996. Since 1993, China has been the world's largest developing-country recipient of FDI. In the mid-1990s, large trade surpluses and inbound-capital flows put upward pressure on the yuan and led to a rapid accumulation of foreign reserves.

The reforms led to some severe distortions, however. Naughton concluded that by 1987, China had established, in essence, two separate trading regimes. One was an export processing regime. Although it was extremely open, access was controlled: most domestic firms were excluded, while most foreign-invested firms could participate. The other was the traditional, but increasingly reformed, [domestic] Chinese regime, which is basically an import-substitution regime.[22]

Much of the export processing regime revolved around simple, labor-intensive assembly. In this system, components were imported duty-free, an enterprise in China assembled them, and the goods were then re-exported. In many cases, the Chinese firm simply provided assembly work on a contract basis—it never took title to the imported materials. The export processing regime was fairly small until the early 1990s, never accounting for as much as 10% of total Chinese exports. But as inbound-FDI

* Three SEZs were located in Guangdong province (Shenzhen, across from Hong Kong's New Territories; Zhuhai, next to the Portugese colony of Macao; and Shantou, in the northern part of the province). The fourth (Xiamin) was located in Fujan province, near Taiwan.

† The most ambitious of the SEZs was Shenzhen, a small town on the border of Hong Kong's New Territories. The location was chosen to take advantage of the Hong Kong economy, which was beginning to transfer labor-intensive industry offshore. Shenzhen had almost no industrial base, but the local government moved quickly to upgrade the infrastructure and create a friendly legal environment. The results were immediate and quite astonishing. Industrial output grew at an annual rate of 56% between 1979 and 1983 and increased to 100% in both 1983 and 1984. In 1984, 14 more SEZs were opened along the coast and in major cities. One persistent problem during the early years of investment until 1986 was the issue of currency conversion, but foreign trade continued to increase in the second half of the decade after the expansion of the SEZ experiment. Joint Economic Committee, 1986, *China's Economy Looks toward the Year 2000* (Washington: U.S. Government Printing Office), p. 355.

increased and economic growth in the Special Economic Zones reached a fever pitch in the mid-1990s, foreign invested enterprises' share of exports increased rapidly, reaching 31% in 1995, and more than 40% for the first six months of 1996 (see **exhibit 9**). Exports from the rest of the economy had grown, but at a much slower pace.

State-Owned Enterprise Reform The reforms in the countryside and the Special Economic Zones fueled sharp increases in production and incomes, but they also increased pressure on state-owned enterprises—the backbone of the urban economy. The SOEs had been nurtured under central planning and accounted for 78% of industrial output and 19% of total employment in 1978 (vs. 72% of employment in agriculture). SOEs in key sectors (such as heavy industry, mineral extraction, energy production, and banking) reported to the central government. Others reported to provincial or local governments. Enterprises purchased inputs and sold their output at state-determined prices, produced to a quota, and turned all of their profits over to the state, which also covered operating losses. As of 1978, SOEs were also the primary source of government revenues—they paid income taxes equal to 19% of GDP and remitted profits equal to an additional 19% of GDP.[23] Like most SOEs elsewhere, state-owned enterprises in China were considered overstaffed, inefficient, and poorly managed. The World Bank estimates that manufacturing productivity in SOEs declined at an annual rate of 1.2% from 1978 to 1983.[24] SOEs were, however, the primary conduit for social services in urban areas. They provided housing, education, health care, and lifetime employment for their workers. In many cases children inherited their parents' jobs. This system was known as the "iron rice bowl."

In the early 1980s, some local officials began to experiment with an ad hoc "Management Responsibility System," a counterpart to the Household Responsibility System used in agriculture. New freedoms were negotiated on a firm-by-firm basis and fell into three categories: increased autonomy over production and investment decisions, the right to retain a portion of profits, and the right to sell above-plan output at market prices. By 1984, profit retention and production autonomy were in widespread use, but formal permission to produce above the plan was still rare (see **exhibit 10**). In October 1984, the central government formally approved these practices, which then spread quickly. Price controls for (above-plan) final goods were loosened starting in 1980, and dual-track prices were introduced for intermediate goods in 1985.

Unlike the rural and trade reforms, initiatives designed to improve the performance of SOEs had limited success. SOEs' share of industrial output continued to fall, from 78% in 1978 to 55% in 1990. Despite this drop in their share of output, SOEs' share of total employment showed only a small decline, from 19% to 18%. As non-state firms gained competitiveness, SOEs' monopoly positions were eroded and their combined contributions to the central government fell sharply (from 38% of GDP in 1978, to only 3.6% in 1990).* About two-thirds of SOEs lost money in 1992 and government subsidies to loss-making enterprises increased from 2.0% of GDP in 1985 to 3.1% in 1990.[25] The data are mixed about whether productivity in SOEs increased following the reforms, but most analysts agree that productivity growth in SOEs lagged that in TVEs and the private sector.[26]

While the Management Responsibility System did little to improve SOE performance, it provided opportunities for corruption. Enterprise directors used their personal relationships (*guanxi*†) with local and national leaders to negotiate prices for industrial inputs. Directors often used their lowest-quality inputs for goods bound for the state and focused their efforts and resources on above-plan production. The dual-price system created the opportunity to earn high profits by diverting plan-output to the unregulated market. Because state-delivery quotas were negotiated, SOE managers had an incentive to bribe local officials. International surveys rated China as one of the most corrupt countries in the world.

* This figure, while accurate, overstates the extent of SOE's relative decline. Taxes as a share of GDP were declining sharply during this period, and the central government's share of total tax revenues was also declining (see exhibits). Both of these issues are discussed below.

† Guanxi was an integral part of Chinese culture and business. Some viewed *guanxi* as a social lubricant that helped to establish trust and reciprocity. Others viewed it as mere corruption.

Institutional Reform In addition to the rural, trade, and urban reforms, China implemented a series of institutional reforms between 1978 and 1995. Four were particularly important: increased provincial autonomy, fiscal reform, financial sector reform, and currency reforms.

As part of Deng's impulse toward experimentation, the central government granted provincial governments increased autonomy with regard to taxation and industrial development in 1984. Local governments were granted significant tax collection authority in what was known as the "tax contract system." Under this system, the local government collected taxes and turned over a tax quota to the central government, retaining a high proportion of any above-quota tax revenue. Provincial authorities used this freedom to allocate funds to local SOEs and TVEs. The new system led to a sharp decline in central government revenue, which fell from 9.6% to only 6.0% of GDP between 1986 and 1992. The central leadership viewed this development with alarm as the fiscal contraction at the center eroded the government's ability to stabilize the economy and to effect income transfers across regions.

In 1994, the central government implemented an extensive tax reform. It established a National Tax Service that was responsible for direct collection of national taxes, making central tax collection largely independent of local officials. The 1994 reform also reduced the number of taxes from 32 to 18 and introduced a value-added tax. Finally, it moved the system toward more uniform treatment for domestic and foreign-invested firms. Prior to reform, income tax rates had varied by ownership type and because of bargaining between firms and various tax collection authorities. After the reforms there was a single income tax applied to all domestic firms and the government announced that it planned to unify the tax treatment of foreign-invested firms.[27] The new system reversed fiscal contraction, and the central government's share of consolidated revenue rose dramatically from 22% in 1993 to 50% in 1996.[28]

The dispersal of economic power to the provinces also had an adverse effect on the conduct of monetary policy. Because local governments often appointed the directors of regional branches of the People's Bank of China, they could pressure local branches to overextend credit and to direct loans to politically-favored projects, rather than to those that were economically viable or which the central government wished to support.[*] This led to excessive credit expansion and a rising share of bad loans. In response, the central government moved to strengthen the monetary functions of the People's Bank of China. In 1995, the central government established a new Central Bank Law that prohibited overdrafts to government agencies and recentralized monetary control in the central bank.

Although the main thrust of institutional reforms in the 1990s was to recentralize fiscal and monetary controls, there had also been a quiet move away from China's rigid political centralization. During the Maoist period, the commune system served both economic and political functions such as tax collection and enforcing population controls. As the commune system was dismantled, the reformist leaders began to fear that a political vacuum was forming in the countryside. To fill this void, reformist leaders began to introduce competitive elections for village-level officials in the late-1980s. By the mid-1990s, four-fifths of Chinese villages had held at least one such election. Studies show that village elections improved governance. For example, in areas where village elections were held, there was more compliance with tax collection and population controls.[29]

The final set of institutional reforms involved currency convertibility. Prior to 1986, the yuan was largely inconvertible. Domestic exporters were allowed to retain only a small percentage of their export earnings,[†] and importers had to petition the Bank of China for currency. In an effort to decentralize decision making while still retaining some control, the central government introduced a dual exchange rate system. Under this system, the central bank fixed the official exchange rate but allowed limited free exchange on a parallel "swap market." The exchange rate on the swap market

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* The local influences on money creation came out when the central government needed to print money to meet the credit shortfalls created by the actions of these local governments.

† Special allowances were made for foreign producers operating in SEZs.

was set by market forces and was generally much lower than the official rate. Domestic enterprises were forced to turn over the bulk of their foreign receipts to the central bank at the official rate but could trade a small portion on the swap markets. Enterprises with foreign capital were allowed to trade all of their export receipts. The treatment of domestic enterprises served as a tax on domestic exports while subsidizing imports.[30]

In 1994, the authorities abolished the dual exchange rate and merged the market and official rates at the market rate. This amounted to an effective devaluation of the yuan by about 50%. The action gave a large boost to Chinese exports. The merchandise trade balance was in surplus every year from 1993, rising to $18.1 billion in 1995. With the exception of 1993, the current account was in surplus every year since 1990. These surpluses, combined with large FDI inflows, led to a huge buildup of foreign exchange reserves.[31]

Economic Strategy in the Mid-1990s

China's ninth five-year plan (1996-2000) outlined the country's economic strategy at the end of the century. It established a goal of 8% GDP growth and noted the necessity of completing two fundamental transitions: from a traditional, planned economy to a "socialist-market economy," and from extensive growth (based on increases in inputs) to intensive growth (driven by improvements in efficiency).

The plan consisted of five (sometimes contradictory) initiatives. The first was to continue the fight against inflation through fiscal and monetary restraint. Inflation had peaked at 24% in 1994, but had fallen to 3% by 1997. Second, the reform of state-owned enterprises was to be refocused and accelerated. The effort was narrowed to the 1,000 largest state-owned firms. Smaller firms were to be privatized or shut down.

The third initiative involved strengthening China's integration with the international economy. In order to achieve its growth objectives, China needed unfettered access to international export and capital markets. But tensions created by China's import restrictions, rapid growth in exports, and the large bi-lateral trade surplus with the United States had led to China's exclusion from the newly formed World Trade Organization. WTO membership would have guaranteed access to export markets. Without it, China would be forced to rely on bi-lateral negotiations.

The fourth initiative was designed to increase productivity growth. Science and technology funding was increased and the central government announced that it would focus industrial policy on five "pillar" industries. These industries (machinery, electronics, petrochemicals, automobiles, and construction) were to receive increased investment appropriations and special protection from international competition. Proposals to protect these industries had led to some of the sharpest conflicts with China's trading partners. Finally, the plan reiterated the need for economic and political stability.

Challenges on the Eve of a New Millennium

China experienced a stunning transformation in the Deng era. Although highest in the coastal provinces, growth was widespread. If China's 30 provinces had been counted as individual economies, the 20 fastest-growing economies in the world between 1978 and 1995 would have been Chinese.[32] The share of the labor force employed in agriculture declined from 71% to 50%, a shift that took 59 years in Japan. China's economic transformation was matched by improvements in social indicators. The birth rate fell by 25%. Infant mortality declined from 85 per 1,000 births in 1975 to 45 in 1990—compared with 127 for India and 111 for Indonesia, both measured in 1990.[33] Various estimates put the number of people who were lifted above absolute poverty in the 1980s at around 100 million.

Despite these impressive achievements, Zhu faced a series of unresolved issues that threatened to derail future growth. SOE losses were mounting and rising unemployment threatened social stability. The banking system was in danger of collapse. Relations between the central government and the provinces remained tense. Further integration with the world trading system was threatened by China's exclusion from the WTO. And unchecked development had caused serious environmental damage.

SOE Reform Despite vigorous reform efforts since 1984, the financial performance of SOEs continued to deteriorate. As TVEs, private firms, and foreign-invested enterprises flourished in the 1990s, state-owned enterprises had been in steady retreat. By 1994, SOEs produced the majority of output in just nine sectors.* These sectors were protected by regulatory or technological barriers to entry, and thus provided a safe harbor for struggling state firms. In 1996, half of SOEs were losing money, and the government estimated that 30% were effectively bankrupt.

In 1996, Vice-Premier Zhu expressed pessimism about SOE performance: "The current problems of SOEs are excessive investments in fixed assets with very low rates of returns and a low sales-to-production ratio, giving rise to mounting inventories. The end result is that the state has to inject an increasing amount of working capital through the banking sector into the state enterprises."[34]

The politics of SOE reform had always been much more difficult than the economics of reform. The SOEs were considered the backbone of socialism, thus making an explicit privatization policy difficult. Surveys suggested that about one-third of the 100 million SOE workers could be laid off with no effect on output, but liquidating insolvent SOEs could easily lead to political and social instability.

Beginning in 1994, the Chinese government adopted a three-pronged new approach toward SOEs, summarized in the slogan, "Grasping the big ones and letting go of the small ones." The first prong was to preserve government control of the largest SOEs, while attempting to reform these enterprises by combining them into Chaebol-type conglomerates and by altering their governance structures.[35] The second prong was to permit outright privatization of the small SOEs controlled by local governments.† The third prong was to allow bankruptcies and mergers of the truly nonperforming SOEs. In September 1997, at the 15th Party Congress, the Chinese leadership formally affirmed this policy.

Unemployment China's intense focus on rapid growth was driven by the need to create jobs for the country's vast population. Even with a highly effective birth-control program in place, China's population continued to increase by approximately 14 million people per year—equivalent to adding another Texas or Australia annually. In addition to this natural population growth, several factors heightened the need to create jobs. Large numbers of workers continued to leave farming. Chinese experts predicted that as many as 180 million working-age adults would be under- or unemployed in rural areas by 2005.[36] Further, there was vast overemployment in the state-sector. Finally, the reforms since 1978 had loosened political control of the population. As the power of the units (*danwei*) declined, many workers left their home counties, creating an estimated 100 million "floating workers" who moved from city to city seeking temporary employment.

The Financial Sector The poor financial performance of SOEs was reflected in the deteriorating finances of the financial sector. In the late 1980s, in an effort to contain fiscal deficits, the central government directed state banks to cover SOE losses with loans. By the mid-1990s, SOEs absorbed more than 70% of the loans granted by state banks. The Chinese government estimated that loans at state banks equal to 8%-10% of GDP would have to be written off, but international analysts put the

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* Sectors dominated by SOEs include: resource extraction, utilities (water, power, and gas supply), tobacco, machinery, petrochemicals, automobiles, and construction.

† Because of the ideological sensitivity of the issue, the Chinese government does not use the term *privatization* explicitly. Instead, euphemisms such as *ownership change* and *nonpublic ownership* are used to refer to what functionally is a privatization process.

figure much higher—at 25% to 35%. By contrast, the costs associated with the savings and loan crisis in the United States amounted to only 2% of GDP.[37]

To deal with this issue, the political and policy functions of Chinese banks were separated from their commercial functions. Three new policy banks were established in 1994 for the purpose of policy lending. This allowed other banks, primarily the four large state banks, to specialize in commercial lending activities.* Over time, the commercial banks were to transfer their policy lending portfolio to the policy banks.[38]

In addition, the authorities opened two stock exchanges in Shanghai and Shenzhen and allowed the establishment of nonbank financial institutions to engage in limited financial intermediation. Several foreign banks opened representative offices, although their operations were strictly limited.

Provincial-Center and Province-Province Tensions The moves toward fiscal recentralization helped to stabilize the central government's fiscal situation, but significant tensions remained. The income gap between the booming coastal provinces and the interior regions continued to grow (see **exhibit 14**), and the central government's attempts to transfer resources to poorer regions were resisted by the wealthier provinces. As coastal provinces became fiscally self-sufficient, the central government's influence over them was sharply curtailed. Senior officials in Guangdong have noted that central austerity efforts have little effect on them, because they were net contributors to the central budget.[39]

The rich coastal provinces had nearly independent industrial policies—they provided tax breaks to investors, built infrastructure, and subsidized key sectors. Many provinces had erected trade barriers against neighboring provinces, and the transportation infrastructure often petered out at provincial borders. Despite China's huge size, little regional specialization had occurred. Alwyn Young, who analyzed trade patterns and inter-regional variation in production patterns, concluded that, instead of specializing, most provinces attempted to enter the same industries. This led to excessive industrial duplication, large opportunity costs, and growing regional tensions.[40]

Political Liberalization and Human Rights China's economic reforms had not been matched by political liberalization. While many villages had held contested elections for local positions, the CCP maintained its monopoly on all provincial and national positions. There was disagreement among economists and political scientists about whether sustained economic growth required political freedom.† The CCP clearly believed it was not.

Grassroots calls for democracy and local autonomy led to several incidents that heightened tensions with other countries. Two events in 1989 brought these issues to a head. In March of that year, demonstrations protesting China's control of Tibet led to PLA intervention and the imposition of martial law in the region. Two months later, tanks were used to clear democracy demonstrators from Tiananmen Square, leading to several hundred deaths.‡ These incidents, as well as other disagreements over human rights—such as the use of prison labor and forced sterilizations—led to periodic calls for economic sanctions against China. These issues were raised annually when the United States Congress reviewed China's most-favored-nation status.

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* The policy banks are the State Development Bank, the Agricultural Development Bank, and the Export-Import Bank. The four main state banks are the Industrial and Commercial Bank, the Agricultural Bank, the Bank of China, and the People's Construction Bank

† Some economists suggested that political freedom was a luxury good—that is, one for which demand grew rapidly as living standards rose.

‡ There remains much disagreement about the number of deaths that occurred in Tiananmen Square. The Chinese government denies that any students died. *The New York Times* cites "a minimum of several hundred killed." *The Times* continues: "It is possible that the true number of deaths might be 1,500 or more." *The New York Times*, June 6, 1989, page A1.

Economic Integration China's economic strategy depended on continued access to international markets, but its trading partners had become increasingly concerned about their levels of access to the Chinese market. China's exporters could be assured of continued access to foreign markets only if China joined the World Trade Organization and conformed to its fair trade principles. But the United States had blocked China's ascension to the WTO because of a dispute about the pace of import liberalization. The United States promised to veto China's entry to the WTO until it agreed to join as a "developed country." China was unwilling to join without "developing country" status. "Developed" countries were expected to meet WTO standards quickly, while "developing" countries were allowed an extended transition period, as well as an exemption for "concessions that are inconsistent with their development, financial, and trade needs."[41]

China's status upon entry to the WTO would determine the pace of further import liberalization, particularly in "pillar" industries and those dominated by SOEs. Abrupt import liberalization would place further pressure on SOEs and state-owned banks, perhaps further complicating the reform process.

In spite of the WTO dispute, China had undertaken several policies designed to encourage closer integration with the world economy. The yuan was fully convertible for current account transactions, although not for capital account operations. The government had implemented a series of tariff reductions, with the average tariff level declining from 40% in 1991 to 23% in 1996. The government announced that it planned further reductions, to 15%, by 1998. Nontariff barriers had been reduced—the number of items with import quotas was cut from 660 to 384 in 1996—but still covered a large portion of trade, including many agricultural products, machinery, and electronic products. Finally, the central government had cut back on import tariff rebates and VAT rebates for exports by enterprises with foreign capital.[*]

The dispute over China's WTO entry was exacerbated by a disagreement over the size of the U.S.-China bilateral balance. The United States reported a $39.5 billion deficit with China in 1996, while China claimed its surplus was only $10.5 billion.[†] The primary source of conflict was over how to account for the value of goods that passed through Hong Kong. When calculating the bilateral trade balance, the United States attributed to China the full value of all goods shipped through Hong Kong. China counted only the value of goods leaving China whose final destination was known when they left the country. At heart, the dispute centered around how to account for the value added to these goods in Hong Kong. One group of economists put the true bilateral imbalance at $16 billion-$22 billion for 1995 (compared with the U.S. estimate of $33.7 billion and the Chinese claim of $8.6 billion).[42]

The Environment Rapid economic growth had led to extensive environmental damage in China. The country's air and water were among the most polluted in the world, especially in urban areas. In addition to aesthetic losses, the economic costs of pollution were extremely high. The World Bank estimated that the total economic costs of pollution were between 3% and 8% of GDP, and that more than 20% of deaths in China were pollution-related.[43]

At least three factors contributed to the high levels of pollution in China. First, energy use had grown rapidly, and nearly 80% of China's energy was generated using coal—a pollution-intensive energy source. Second, rapid urbanization had overtaxed waste disposal systems and exposed high

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[*] Both measures have produced an outcry among foreign companies. Although the tax equalization is meant to level the playing field, foreigners believe that domestic firms have many other advantages including lower land rentals and lower prices for many essentials. Lower tax burdens are viewed as offsetting these disadvantages on the part of foreign-invested enterprises (FIEs). The scrapping of the tariff exemptions is expected to increase the business costs for the FIEs. The US-China Business Council estimates that the business cost will rise by 28%. "How and Why to Survive Chinese Tax Torture," *The Economist* (1995): 63-64.

[†] If the U.S. figure is correct, then China has the second highest bilateral surplus with the United States (after Japan's $59 billion). If the Chinese figure is correct, China's surplus with the United States would be lower than those of Japan, Canada, Mexico, Germany, and Taiwan.

numbers of people to pollutants. More than 200 million people had moved to urban areas since 1978, but the waste infrastructure had not kept pace. Seventy-seven percent of industrial waste was treated, compared with only 7% of municipal waste.[44] Third, deforestation and the loss of arable land had reduced the environment's ability to absorb pollution. Deforestation averaged 0.7% per year in the 1980s, and approximately 0.35% of farmland was lost each year to urbanization and construction. Total cropland in China declined from 105 million hectares in 1961 to only 96 million in 1990, while the population doubled.

Despite high levels of pollution, several positive trends had emerged. Growth in the emission of major pollutants grew more slowly than GDP, and the government indicated that it would raise energy prices and invest in pollution control.[45] Still, the magnitude of the required investment was disputed. China spent approximately 0.6% of GDP on environmental control and planned to increase this to 0.85%.[*] The World Bank recommended that China invest at least 3.1% of GDP in pollution abatement—as compared with 2.2% in the United States. World Bank economists estimated that these investments would lead to benefits totaling 8.8% of GDP.

Whither China?

In late 1997, the Asian financial crisis highlighted the severity of the issues facing China. Starting with several bank defaults in Thailand, the crisis had spread quickly to Malaysia, Indonesia, the Philippines, and South Korea. Each was forced to close insolvent financial institutions, devalue its currency, and ask the International Monetary Fund for assistance. The Asian crisis was of great concern for two reasons. It revealed weaknesses in the "Asian" development model China had been pursuing. In addition, the large devaluation by China's neighbors threatened its export markets, potentially cutting into export growth just as domestic demand was slowing.

Zhu had recently received his year-end economic projections for 1997. The good news was that GDP had increased by 8.8%, while inflation had declined to less than 3%. But these figures masked several troubling developments. Foreign investment had grown only 3%, retail sales had slowed, and inventories had piled up.

Although China's growth rate since 1978 was extraordinary, the structural impediments to reform were becoming more severe. It was not difficult to design isolated policies to address SOE restructuring, job creation, relations with the provinces, international trade relations, or the environment. The difficulty arose when the individual policies came into conflict.

Could China continue to muddle through—relying on incremental reform, spontaneous innovation in the provinces, and annual U.S. approval of MFN? Or was it time for a fundamental rethink of China's strategy, perhaps leading to faster and more comprehensive reform?

[*] The Chinese government estimates that higher expenditures are needed, and that it would take at least 1.5% of GDP just to control environmental degradation. *World Resources: A Guide to the Global Environment*, World Resources Institutes, 1994, p. 62.

Exhibit 1 Map of China

Exhibit 2 National Income Accounts (billions of yuan at current prices)

Year	1978	1982	1986	1990	1991	1992	1993	1994	1995	1996
Private Consumption	204.4	320.9	522.9	911.3	1,031.6	1,246.0	1,568.2	2,123.0	2,634.3	3,257.9
Investment	119.0	157.5	419.8	644.4	751.7	963.6	1,499.8	1,859.2	2,278.7	2,686.7
Government Consumption	26.3	43.8	85.2	225.2	283.0	349.2	450.0	598.6	697.3	759.2
Exports	17.2	40.5	79.0	297.0	382.8	468.4	524.2	1,043.3	1,242.7	
Imports	17.9	32.5	77.8	255.2	339.6	444.4	594.0	997.0	1,078.3	
Net Exports										145.9
GDP[a]	349.1	530.2	1,029.1	1,854.8	2,161.8	2,663.8	3,463.4	4,662.2	5,826.1	6,849.8
Real GDP Growth (%)	--	9.0	8.8	8.3	13.5	14.2	13.4	11.2	10.7	9.7
Govt. Consumption as % of GDP	7.5	8.3	8.3	12.1	13.1	13.1	13.0	12.8	12.0	11.6
Gross Savings as % of GDP	36.5	28.2	34.7	37.4	--	37.2	40.3	43.6	41.0	42.9
Inflation (%)	1.9	2.1	8.9	3.1	3.5	6.3	14.6	24.2	16.9	8.3

Source: World Bank, IMF. *Chinese Statistical Yearbook.* --: Data not available.

[a] GDP as reported by the Chinese government includes the value of subsidies paid to agriculture, industry, and the service sector in addition to the factor costs of production.

Exhibit 3 Gross Output Value by Sector and Ownership[a] (billions of yuan at current prices)

Year	1978	1982	1986	1990	1992	1994	1995	1996
Total	563.4	829.4	1,520.7	3,158.6	4,615.0	9,266.0	11,223.4	12,302.3
Agriculture	139.7	248.3	401.3	766.2	908.5	1,575.0	2,034.1	2,342.8
Industry, of which	423.7	581.1	1,119.4	2,392.4	3,706.6	7,690.9	9,189.4	9,959.5
State-owned	328.9	432.6	697.1	1,306.4	1,782.4	2,620.1	3,122.0	2,838
Collective-owned	94.8	144.2	375.1	852.3	1,410.1	3,143.4	3,362.3	3,924
Individual-owned	--	0.3	30.9	129.0	250.7	885.3	1,182.1	1,544
Other	--	3.9	16.3	104.8	263.4	1,042.1	1,523.1	1,653
Agriculture as % of Total	24.8	29.9	26.4	24.3	19.7	17.0	18.1	19.0
SOEs as % of Total Industrial Output	77.6	74.4	62.3	54.6	48.1	34.1	34.0	28.5
COEs as % of Industrial Output[b]	22.4	24.8	33.5	35.6	38.0	40.9	36.6	39.4
COEs as % of Total Agricultural and Industrial Output[b]	16.8	17.4	24.7	27.0	30.6	33.9	30.0	31.9

Source: Chinese Statistical Yearbook

[a] These figures exceed the GDP figures because they report Gross Output Value, not value added, by sector. Gross Output Value for a sector is equal to the sum of output value (list price multiplied by quantity produced) for each enterprise in the sector. This methodology leads to double counting of intermediate goods. The government does not provide the data required to calculate value added by sector.

[b] COEs are collectively-owned enterprises. The category includes Township and Village Enterprises, Urban Enterprises, and Cooperative Enterprises.

Exhibit 4 Consolidated Government Revenue and Expenditures (billions of yuan at current prices)

Year	1970	1975	1980	1985	1989	1990	1991	1992	1993	1994	1995	1996
Revenue from Enterprises [a]	37.9	40.0	43.5	63.9	64.6	68.2	70.2	68.4	63.1	60.9	75.9	82.2
Industrial and Commercial Taxes	24.2	35.8	51.0	109.7	176.0	185.8	198.1	224.4	319.4	391.4	458.9	527.0
Tariffs	0.7	1.5	3.3	20.5	18.1	15.9	18.7	21.2	25.6	27.2	29.1	30.1
Other	3.3	4.1	18.0	56.8	67.2	81.4	78.7	78.6	67.5	78.6	92.8	135.0
Total Revenues	**66.1**	**81.4**	**115.8**	**250.9**	**325.9**	**351.3**	**365.7**	**392.6**	**475.6**	**558.1**	**656.7**	**774.3**
Construction	39.3	48.2	71.5	112.8	129.2	136.8	142.8	161.3	183.5	239.3	285.5	[c]
Culture and Education	5.2	10.3	19.9	40.8	66.8	73.8	884.9	97.0	117.8	150.2	175.6	[c]
National Defense	14.5	14.2	19.4	19.2	25.1	29.0	33.0	37.8	42.6	55.1	63.7	[c]
Government Administration	3.2	4.2	7.6	17.1	38.6	41.4	41.4	46.3	63.4	847	99.7	[c]
Subsidies to SOEs				50.7	59.8	57.8	51.0	44.4	41.1	36.6	32.7	[c]
Other	2.7	5.1	4.4	10.5	22.6	27.3	36.4	31.8	56.9	49.9	57.8	[c]
Expenditures [b]	**64.9**	**82.0**	**122.8**	**251.1**	**342.1**	**366.1**	**389.5**	**418.6**	**505.3**	**615.8**	**715.0**	**827.4**
Deficit/Surplus	1.2	-0.6	-7.0	-0.2	-16.2	-14.8	-23.8	-26.0	-29.7	-57.7	-58.3	-53.1
Surplus/Deficit as % of GDP			-1.5	0.0	-1.0	-0.8	-1.1	-1.0	-0.9	-1.2	-1.0	-0.8
Central Govt. Revenue as % of Total Rev.	28	12	25	31	25	28	26	25	20	52	50	47
Central Govt. Spending as % of Total Spending	59	50	54	32	26	27	28	28	26	29	28	[c]

Source: Chinese Statistical Yearbook.
[a] Includes profit remissions and income taxes from SOEs.
[b] Excludes interest payments on government debt. This means that expenses and the deficit are understated. The Chinese government reports only consolidated principal and interest payments.
[c] Data not available.

Exhibit 5 Balance of Payments[a] (millions of US dollars)

Year	**1978**	**1980**	**1982**	**1984**	**1986**	**1988**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**
Merchandise exports		18,188	21,125	23,905	25,756	41,054	51,519	58,919	69,568	75,659	102,561	128,110	151,077
Merchandise imports		-18,294	-16,876	-23,891	-34,896	-46,369	-42,354	-50,176	-64,385	-86,313	-95,271	-110,060	-131,542
Trade balance		**-106**	**4,249**	**14**	**-9,140**	**-5,315**	**9,165**	**8,743**	**5,183**	**-10,654**	**7,290**	**18,050**	**19,535**
Net services		241	488	-46	1,551	1,220	1,451	2,784	-225	-868	302	-6,093	-1,984
Net factor payments		195	451	1,620	176	-126	1,107	914	288	-1,259	-1,019	-11,774	-12,437
Net transfers		570	486	442	379	419	274	831	1,155	1,172	335	1,435	2,130
Current account		**900**	**5,674**	**2,030**	**-7,034**	**-3,802**	**11,997**	**13,272**	**6,401**	**-11,609**	**6,908**	**1,618**	**7,243**
Capital account items													
Net FDI		57	386	1,124	1,425	2,344	2,657	3,453	7,156	23,115	31,787	33,849	38,066
Net portfolio flows		[c]	21	-1,638	1,568	876	-241	235	-57	3,049	3,543	631	1,744
Mon. & bank transactions		-290	-69	-489	2,951	3,913	839	4,344	-7,433	-2,690	2,685	4,035	156
Errors and omissions		[c]	293	-889	-958	-957	-3,205	-6,767	-8,211	-10,096	-9,100	-17,822	-15,504
Overall balance		561	6,305	138	-2,048	2,374	12,047	14,537	-2,060	1,769	30,453	22,469	31,705
Current acct. balance, % of GDP		0.3	2.1	0.7	-2.4	-0.9	3.1	3.3	1.3	-1.9	1.3	0.2	0.9
Avg. exchange rate (yuan/$)	1.68	1.50	1.89	2.32	3.45	3.72	4.78	5.32	5.51	5.76	8.62	8.35	8.31
Real exchange rate (Inflation adjusted, 1978 = 100)[b]	100	96	68	54	39	43	37	32	32	34	28	31	33
Foreign currency and gold reserves	[c]	3,116	11,840	17,801	11,994	19,135	30,209	44,308	21,230	22,999	53,560	76,037	107,676
Total foreign debt	[c]	4,504	[c]	[c]	[c]	42,439	55,301	60,259	72,428	85,928	100,457	118,090	[c]
Inflation (CPI, %)	1.9	2.6	2.1	11.6	8.9	16.3	3.1	3.5	6.3	14.6	24.2	16.9	8.3
Credit growth (%)	11.2	18.4	10.4	31.6	34.1	18.9	23.3	20.0	22.3	42.1	23.8	22.8	[c]

Source: IMF, *Balance of Payments Statistics Yearbook* and *International Finance Statistics Yearbook*. 1980 information from World Bank, *World Tables*, 1991, as reported in China: The Great Awakening, Harvard Case Study, number 9-794-019.

[a] The trade figures in this table differ from those which follow because of differences in the way China and the IMF account for goods transhipped through Hong Kong. This table is based on IMF data. The tables that follow are based on Chinese government data.

[b] Measured against the U.S. dollar. A decline in the index indicates a *depreciation* of the yuan.

[c] Data not available.

Exhibit 6 Exports by Destination

	Exports (millions of US dollars)							Exports (as percent of total)						
	1978	**1980**	**1985**	**1990**	**1992**	**1994**	**1996**	**1978**	**1980**	**1985**	**1990**	**1992**	**1994**	**1996**
Total	9,955	18,099	27,327	62,091	84,940	121,047	151,197							
Hong Kong	2,533	4,354	7,148	27,163	37,511	32,365	32,904	25.4	24.1	26.2	43.7	44.2	26.7	21.8
Japan	1,719	4,032	6,091	9,210	11,699	21,490	30,888	17.3	22.3	22.3	14.8	13.8	17.8	20.4
Taiwan	[a]	[a]	[a]	320	697	2,242	2,804	[a]	[a]	[a]	0.5	0.8	1.9	1.9
Other Asia	479	1,734	1,493	4,076	6,740	11,462	16,959	4.8	9.6	5.5	6.6	7.9	9.5	11.2
United States	271	983	2,336	5,314	8,599	21,421	26,731	2.7	5.4	8.5	8.6	10.1	17.7	17.7
Germany	330	771	746	2,062	2,447	4,762	5,852	3.3	4.3	2.7	3.3	2.9	3.9	3.9
Other EU	843	1,543	1,537	4,213	5,557	10,656	14,016	8.5	8.5	5.6	6.8	6.5	8.8	9.2
Other	3,780	4,682	7,976	9,733	11,690	16,649	21,043	38	25.8	29.2	15.7	13.8	13.8	13.9

Source: Direction of Trade Statistics Yearbook.

[a]Data not available.

Exhibit 7 Trade Balance with Selected Countries[a] (million of US dollars)

	1978	**1980**	**1985**	**1990**	**1992**	**1994**	**1996**
Total	-1,140	-1,900	-1,490	8,740	4,350	5,400	12,200
Hong Kong	2,458	3,784	2,386	12,598	16,972	22,877	25,065
Japan	-1,386	-1,137	-9,087	1,554	-1,987	-4,829	1,698
Taiwan	[b]	[b]	[b]	-1,934	-5,193	-11,842	-13,382
Other Asia	93	808	-600	1,173	200	-1,340	-4,108
United States	-450	-2,847	-2,863	-1,277	-304	7,444	10,552
Germany	-700	-562	-1,701	-918	-1,576	-2,374	-1,473
Other EU	-97	132	-2,167	-1,954	-1,283	-812	1,458

[a] Chinese trade statistics vary from some of its trading partners' particularly the industrial countries. See the text for a short discussion of the disagreement with the United States on this issue.

[b] Data not available.

Exhibit 8 Utilization of Foreign Capital[a] (billion US dollars)

	1979-1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Foreign loans	11.8	1.3	2.7	5.0	5.8	6.5	6.3	6.5	6.9	7.9	11.2	9.3	10.3	12.6
Foreign direct investment	1.9	1.6	1.7	2.0	2.3	3.2	3.4	3.5	4.4	11.0	27.5	33.8	37.5	41.7
Other foreign investments	0.9	0.2	0.3	0.4	0.3	0.6	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.4
Total	14.5	3.1	4.7	7.3	8.4	10.3	10.1	10.3	11.6	19.2	39.0	44.3	48.1	54.7

Source*:* Chinese Statistical Yearbook.

[a] This table reports total *inbound* FDI. The balance of payments (**Exhibit 5**) reports *net* FDI.

Exhibit 9a Exports by Enterprises with Foreign Capital (%)

Year	Exports	Share in total exports
1985	0.3	1.1
1986	0.6	1.9
1987	1.2	3.1
1988	2.5	5.2
1989	4.9	9.4
1990	7.8	12.6
1991	12.0	16.8
1992	17.4	20.4
1993	25.2	25.8
1994	34.7	28.7
1995	46.9	31.5
1996 (first six months)	26.2	40.8

Source*:* China, SSB; China, General Administration of Customs, China Customs Statistics, as reported in Barry Naughton, "China's Emergence and Prospects as a Trading Nation," *Brookings Papers on Economic Activity* 2: 1996. p. 299.

Exhibit 9b Principal Imports and Exports for China (1996)

Principal Exports	$ billion	Principal Imports	$ billion
Clothing and Textiles	37.1	Machinery and Elect Equip.	54.8
Machinery and Elect. Equip	35.3	Chemicals	18.1
Foodstuffs	11.6	Textiles	12.0
Chemicals	8.9	Iron and Steel	7.2
Footwear	7.1	Mineral Fuels	6.9
Mineral Fuels	5.9		

Source: Economist Intellegence Unit: Country Report: China, 3rd Quarter 1997

Exhibit 10 Decentralization of Decisionmaking in State-owned Firms

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Marginal retention rate (%)[a]	11	12	11	14	17	17	19	23	26	27
Autonomy in production decisions (% firms)	7	8	10	14	25	35	40	53	64	67
Management responsibility system (% firms)	0	0	0	1	2	4	8	42	83	88
New management appointed after 1980 (% firms)	9	9	15	25	40	40	61	75	85	94

Source: The World Bank, *China 2020: Development Challenges in the Next Century*, 1992.

Note: Based on a 1991 retrospective sample survey of state enterprises.
[a]Portion of profits that could be retained if profits exceeded the base level.

Exhibit 11 Population

	Total Population (millions)	Urban Population as % of Total	Rural Population as % of Total	Population Growth Rate (%)
1975	924.2	17.3	82.7	1.57
1980	987.0	19.4	80.6	1.19
1986	1,075.0	24.5	75.5	1.55
1988	1,110.2	25.8	74.2	1.58
1990	1,143.3	26.4	73.6	1.44
1991	1,158.2	26.4	73.6	1.30
1992	1,171.7	27.6	72.4	1.16
1993	1,185.1	28.1	71.9	1.15
1994	1,198.5	28.6	71.4	1.12
1995	1,211.2	29.0	71.0	1.05
2000[a]	1,255.1	[b]	[b]	0.93
2010[a]	1,348.0	[b]	[b]	0.70
2020[a]	1,434.3	[b]	[b]	0.60
2030[a]	1,500.6	[b]	[b]	0.39

Source: Chinese Statistical Yearbook. World Bank, *World Population Projections*.
[a] Projections
[b] Data not available.

Exhibit 12 Indicators of Economic Development

Country	Population in 1995 (millions)	Population Density (people/km^2)	GNP per Capita ($, 1995)	Average GDP Growth (1990-95)	External Debt as % of GDP (1995)	Trade as % of GDP	Labor Force in Agriculture (%, 1990)	Population Below $1/day (%, 1985 prices)	Average Inflation (%, 1990-95)
Asia									
China	1,200.2	125	620	12.8	17.2	40	74	29.4	9.3
India	929.4	282	340	4.6	28.2	27	64	52.5	9.8
Indonesia	193.3	101	980	7.6	56.9	53	57	14.5	8.8
Korea	44.9	454	9,700	7.2		67	18	[a]	6.7
Malaysia	20.1	61	3,890	8.7	42.6	194	27	5.6	3.3
Philippines	68.6	229	1,050	2.3	51.5	80	45	27.5	9.8
Thailand	58.2	113	2,740	8.4	34.9	90	64	0.1	5.0
Vietnam	73.5	221	240	8.3	130.2	83	72	[a]	88.3
Other Developing									
Chile	14.2	19	4,160	7.3	43.4	54	19	15.0	17.9
Poland	38.6	123	2,790	2.4	36.1	53	27	6.8	91.8
Russia	148.2	9	2,240	-9.8	37.6	44	14	1.1	148.9
South Africa	41.5	35	3,160	0.6	[a]	44	14	23.7	13.9
Developed									
Canada	29.6	3	19,380	1.8		71	3	[a]	2.9
Japan	125.2	331	39,640	1.0		17	7	[a]	1.4
Germany	81.9	230	27,510	[a]		46	4	[a]	[a]
United Kingdom	58.5	238	18,700	1.4		57	2	[a]	5.1
United States	263.1	28	26,980	2.6		24	3	[a]	3.2

Source*:* World Bank, World Development Indicators, 1997.

[a] Data not available or not reported.

Exhibit 13 Indicators of Social Development

Country	Life Expectancy at Birth (years)	Fertility Rate (1995)[a]	Adult Illiteracy Rate (% males)	Adult Illiteracy Rate (% females)	Labor Force (millions, 1995)	Annual Deforestation[b] (1,000 km^2)	Average Annual Deforestation[b] (%, 1980-90)	Population with Safe Access to Water (%)	Malnutrition (% under age 5)
Asia									
China	69	1.9	10	27	709	8.8	0.7	83	17
India	62	3.2	35	62	398	3.4	.6	63	63
Indonesia	64	2.7	10	22	89	12.1	1.1	63	39
Korea	72	1.8	1	[c]	22	0.1	0.1	89	[c]
Malaysia	71	3.4	11	22	8	4.0	2.1	90	23
Philippines	66	3.7	5	6	28	3.2	3.4	84	30
Thailand	69	1.8	4	8	34	5.2	3.5	81	13
Vietnam	68	3.1	4	9	37	1.4	1.5	38	45
Other Developing									
Chile	72	2.3	5	5	6	-0.1	-0.1	96	1
Poland	70	1.6	[c]		19	-0.1	-0.1	[c]	[c]
Russia	65	1.4	[c]		77	15.5	0.2	[c]	[c]
South Africa	64	3.9	18	18	16	-0.4	-0.8	[c]	[c]
Developed									
Canada	78	1.7	[c]	[c]	15	-47.1	-1.1	100	[c]
Japan	80	1.5	[c]	[c]	66	0	0	[c]	3
Germany	76	1.2	[c]	[c]	40	-0.5	-0.4	[c]	[c]
United Kingdom	77	1.7	[c]	[c]	29	-0.2	-1.1	[c]	[c]
United States	77	2.1	[c]	[c]	133	3.2	0.1	90	[c]

Source*:* World Bank, World Development Indicators, 1997.

[a] Fertility rate is the number of children that would be born to a woman if she were to live to the end of her childbearing years.

[b] Annual deforestation refers to the permanent conversion of natural forest area to other uses as a percentage of forested land. Includes shifting cultivation, permanent agriculture, ranching, or infrastructure development. These areas do not include areas logged but intended for regeneration or areas degraded by human or natural disasters. Negative numbers indicate an increase in forest area.

[c] Data not available or not reported.

Exhibit 14a Income Inequality: Net Income of Rural Households in Selected Provinces (yuan/capita, current prices)

	GDP or National Income per Capita[a]			Index (all China = 100)		
Province	**1978**	**1985**	**1995**	**1978**	**1985**	**1995**
All China Total	133.57	397.6	1,577.7	100	100	100
Selected High Income Provinces						
Beijing	224.8	775.1	3,223.7	168.3	195.0	204.3
Shanghai	290.0	805.9	4,245.6	217.1	202.7	269.1
Jiangsu	152.1	492.6	2,456.9	113.9	123.9	155.7
Zhejiang	[b]	548.6	2,966.2	[b]	138.0	188.0
Guangdong	182.3	495.3	2,699.2	136.5	124.6	171.1
Selected Low Income Provinces						
Yunnan	123.9	338.3	1,011.0	92.8	85.1	64.1
Shaanxi	133	295.3	962.8	99.6	74.3	61.0
Gansu	98.4	255.2	880.3	73.7	64.2	55.8
Qinghai	[b]	343.0	1,029.8	[b]	86.3	65.3
Ningxia	115.9	321.2	998.7	86.8	80.8	63.3
Standard Deviation from Index—Calculated using all 30 Provinces				35.2	32.2	49.3

Source: Chinese Statistical Yearbook.

[a] 1978 column reports national income per capita; 1985 and 1995 report GDP per capita.

[b] Data not available.

Exhibit 14b Income Inequality: Rural and Urban GDP per Head (yuan, current prices)

	1978	**1980**	**1985**	**1990**	**1992**	**1994**	**1995**	**1996**
Rural household income	133.6	191.3	397.6	686.3	784.0	1,221.0	1,577.7	1,926.1
Urban household income	316.0	439.4	685.3	1,387.3	1,826.1	3,179.2	3,892.9	4,377.2
Rural income as % of urban income	42.3	43.5	58.0	49.5	42.9	38.4	40.5	44.0

Source: Chinese Statistical Yearbook.

End Notes

[1] Sachs and Woo, 1977, "Understanding China's Economic Performance," NBER working paper 5935.
[2] "How big is Asia?" *The Economist*, February 7, 1998, page 72, and *International Financial Statistics Yearbook*.
[3] *China 2020: Development Challenges in the New Century*, The World Bank, 1997, p. *ix*.
[4] Eckstein, A., 1981, *China's Economic Revolution* (Cambridge: Cambridge University Press).
[5] Fairbank, John King, 1987, *The Great Chinese Revolution, 1800-1985* (New York: Harper & Row).
[6] Lieberthal, Kenneth, 1995, *Governing China* (New York: W.W. Norton and Company).
[7] Lieberthal, p. 45.
[8] Lieberthal, p. 102.
[9] Quoted from John Bryan Starr, 1997, *Understanding China* (New York: Hill and Wang), p. 79.
[10] *Ibid.*, p. 19.
[11] Lieberthal, p. 150.
[12] Grain yields had grown at a 1.8% annual rate between 1952 and 1978. Population had grown at a 2.0% rate. Bruce L. Reynolds, ed., 1998, *Chinese Economic Policy* (New York: Paragon House), p. 214.
[13] John Bryan Starr, 1997, *Understanding China: A Guide to China's Economy, History, and Political Structure* (New York: Hill and Wang).
[14] Procurement prices for quota-production increased an average of 17%. Above-quota production could be sold for 30%-50% more than the new quota prices. J.Y. Lin, "Rural Reforms and Agricultural Growth in China," *American Economic Review* 82(1): 34-51.
[15] Michael Ying-Mao Kau and Susan H. Marsh, eds., 1993, *China in the Era of Deng Xiaoping: A Decade of Reform* (Armonk: M.E. Sharpe, Inc.), p. 107.
[16] World Bank, 1997, *China 2020: Development Challenges in the New Century*
[17] Kau and Marsh, p 106.
[18] *The Economist*, China Survey, November 28, 1992, p. 12.
[19] *China Statistical Yearbook*, 1997.
[20] Naughton, 1996, "China's Emergence as a Trading Nation," Brookings Papers on Economic Activity, p. 273-344.
[21] Naughton, p. 297.
[22] Naughton, 1996, p. 298.
[23] Sachs and Woo, 1997, p. 27.
[24] Kau and Marsh, p. 108.
[25] *China 2020: Development Challenges in the New Century*, The World Bank, 1997, Tables 19-22.
[26] *Ibid*.
[27] World Bank, 1995 #1697, pp. 61-63.
[28] The tax figures are from State Statistical Bureau. *Zhongguo tongji nianjian 1997 [China Statistical Yearbook 1997*]. Beijing: Zhongguo tongji chubanshe, 1997.
[29] Yasheng Huang, 1995 #1128.
[30] Walter Tseng, et alia, *Economic Reform in China: A New Phase* (Washington, D.C.: The International Monetary Fund, 1994), pp. 5-6.
[31] "Emerging Market Indicators." *The Economist* (1997): 108.
[32] *China 2020: Development Challenges in the New Century*, World Bank, 1997, p. 3.
[33] Infant mortality is measured as deaths before age five. "China's Growth Path to the 21st Century: Recommendations from the World Bank." *Transition* 8.5 (1997): 5-7.
[34] *People's Daily, Overseas Edition*, March 11, 1996. Quoted from Sachs and Woo, 1997.
[35] See "China and the Chaebol." *The Economist*, 1997: 97-98.
[36] Lieberthal, p. 245.
[37] *The Economist*, March 8, 1997, "Survey China: The Death of Gradualism," p. S16.
[38] See *The Chinese Economy: Fighting Inflation, Deepening Reforms* (Washington, DC: The World Bank, 1996) for a detailed discussion.
[39] Country Profile: China, *Economist Intellegence Unit*, 1996-1997, page 30.
[40] Alwyn Young, "The Razor's Edge: Distortions and Incremental Reform in the People's Republic of China," University of Chicago working paper.
[41] Office of the United States Trade Representative, "A Summary of the Final Act of the Uruguay Round," via the Internet, @ http://www.wto.org/wto/ursum_wpf.html.
[42] Feenstra, R., W. Hai, W. Woo, J. Sachs, and S. Yao, "The U.S.-China Bilateral Trade Balance: Its Size and Determinants." Research presented at the UNDP-HIID Conference on China's integration with the World Economy.
[43] *Clear Water, Blue Skies*, The World Bank, 1997.
[44] *Clear Water, Blue Skies*, The World Bank, 1997, page 12.
[45] *Clear Water, Blue Skies*, The World Bank, 1997, page 9.