

Economic Reform and Growth in China

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This paper surveys (1) the reasons for economic reform in China to be introduced in 1978, (2) the major components of economic reform, (3) the characteristics of the reform process, (4) why reform was successful, (5) the shortcomings of China's economic institutions, (6) the factors contributing to rapid economic growth, and (7) the future prospects of further reform and growth, with important conclusions summarized in the last section concerning economic reform in general. Much of the material is drawn from the author's book *China's Economic Transformation* (Blackwell, 2002). © 2004 Peking University Press

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INTRODUCTION

China's economic reform toward a market-oriented economy began in 1978 and has been recognized as essentially successful. The average rate of growth of real GDP in the first two decades of reform was about 9.6 percent annually according to official statistics. What were the reasons for the reform to be introduced (section 1)? What were its major components (section 2)? What were the characteristics of the reform process (section 3)? Why was the reform successful (section 4)? What are the shortcomings of China's economic institutions that still remain (section 5)? What accounted for the rapid growth rate of the Chinese economy (section 6)? What are the future prospects of further reform and economic growth (section 7)? These are the questions to be addressed in this paper. Much of the discussion is based on the author's recent book *China's Economic Transformation*, Blackwell Publishers (2002). Section 8 concludes this paper.

1. WHY WAS ECONOMIC REFORM INTRODUCED IN 1978?

Beginning in the early 1950s economic planning was introduced in China that was modeled after the planning system of the Soviet Union. The first Five-Year Plan was initiated in 1953-7. It was in 1978 that China started to abandon the planning system gradually and return to a more market-oriented economy. When I asked a former top Chinese government official why reform was initiated, his reply was that the Communist Party simply resumed the course for developing the Chinese economy as set forth in the four modernization (of agriculture, industry, science and technology, and defense) announced by Premier Zhou Enlai in December 1964. According to this official, the plan for modernization was interrupted by the Cultural Revolution of 1966-1976, and should be resumed as soon as the Cultural Revolution subsided. Of course, even if the Communist Party had had some plan for developing the Chinese economy it might take a different course later under a different set of circumstances. It had adopted a planning system in the 1950s but decided to abandon it. I would like to propose the following as possible reasons for economic reform to be introduced in 1978.

First, the Cultural Revolution of 1966-1976 was very unpopular. The Chinese Communist Party and the government had to change direction in order to get support from the Chinese people. Party Chairman Mao Zedong who engineered the Cultural Revolution died in 1976. The Gang of Four who seized power and supported that ruthless political movement was soon eliminated. Deng Xiaoping became the leader of China because the top Party leadership supported him. It was time for him to make the move to change.

Second, many economic planners had learned from experience that a planning system was difficult to manage and economically inefficient. This is witnessed by the writing of economic officials that appeared in the late 1970's, although the understanding of the weakness of the planning system varied among these officials.

Third, rapid economic growth and development that took place in the more market-oriented neighboring economies served as examples that a market economy can perform better. The neighboring economies included Hong Kong, Taiwan, South Korea and Singapore. The contrasts in the economic performance between North and South Korea, between East and West Germany, and between Eastern and Western Europe reinforced this point.

Fourth, for the reasons stated above the Chinese people desired a market-oriented reform and would support it. The Chinese people had also suffered through the economic consequences of central planning, including the shortage of consumer goods, the limited variety and the lack of improve-

ment in quality. They had to kowtow to the suppliers of consumer goods and waited in long lines to get what was needed. They had to go through the “back door” (or use personal connections) to get what was considered essential consumer goods.

Given these four reasons, economic reform seemed inevitable. There are also supporting human factors favoring the initiation of economic reform. First is the person of Deng Xiaoping. Before Mao died he had designated Hua Guofeng to succeed him as Chairman of the Communist Party. Deng had to take over the leadership from him before trying to reform the economic system. Deng’s leadership during the reform process was recognized to be important. However, given the above four reasons another leader who was able to gain support from the Party leadership and the Chinese people would have had to initiate changes, even if not as effective as Deng.

2. MAJOR COMPONENTS OF ECONOMIC REFORM

2.1. Agriculture

Beginning in 1978 several major institutional reforms have been undertaken. First is the adoption of the household responsibility system in agriculture. Collective farming under the Commune system introduced by Mao in 1958 in his Great Leap Forward Movement was being practiced. Farmers worked as a team consisting of some forty persons. A farmer could not get extra reward by working harder because all members of the team would share the additional output due to his additional labor. Chinese farmers deserved credit for initiating reform in agriculture. Some farmers realized that if they farmed separately the team could produce more in total and still delivered the same amount of output required by the procurement system for government distribution of agricultural products in the economy. The Commune system was changed as the team was reorganized by distributing its land to individual households to farm separately, each getting the additional reward for additional labor after delivering a fixed amount of output to the team for delivery to the government procurement agencies. Such practice was introduced and spread in many areas of the country. In 1978, Deng recognized its beneficial effects and adopted it as a national policy and called it the “household responsibility system.” Agricultural output increased rapidly in China. The farmers became richer. The success of reform in agriculture served as the foundation of reform in other sectors not only by increasing the supply of food but also by changing the ideological thinking of Communist Party members in support of a market economy.

2.2. State-owned Enterprises

Reform of Chinese state enterprises is an example of a gradual approach to economic reform through experimentation. In this case, the following institutional changes were adopted and carried out step by step. The first was to give state enterprises some autonomy in production, marketing and investment decisions rather than simply carrying out the decisions under a system of central planning. The experiment began in late 1978 with six pilot enterprises in Sichuan Province. By the end of June 1980, 6,600 industrial enterprises that were allowed to make such autonomous decisions produced about 45 percent of the total output of all state industrial enterprises. The second was to make them financially independent, allowing them to keep the earnings as their own profits after paying taxes to the state, rather than as revenue belonging to the government. The third was to introduce a responsibility system similar to the household responsibility system in agriculture, first to selected parts of the enterprise under the important reform Decision of the Central Committee of the Communist Party in October 1984, and later to an enterprise in 1987. Under the responsibility system, a part of an enterprise was allowed to keep the remaining profit after surrendering a fixed amount to the enterprise controlling it.

In 1987, further reform of the state enterprises was carried out under the “contract responsibility system.” After paying a fixed tax to the government having jurisdiction over it, each state enterprise was allowed to keep the remaining profit for distribution to its staff and workers and for capital investment. Within one year in 1987, almost all state enterprises were under the new “contract responsibility system.” The idea of such a system sounded appealing to the economic officials who designed it, as witnessed by the author who participated at meetings with these officials. However, the incentives provided under the system turned out to be less impressive than expected. First, the so-called fixed levy to each enterprise was not really fixed but was subject to change depending on the profits of the enterprise. The tax was increased when the profits were higher than expected. This partly destroyed the incentives provided by a fixed levy, which would not interfere with the optimal marginal cost and benefit calculations of the enterprise. Secondly, the additional revenue was not put into good use. The managers could not receive sufficient compensation because a high salary to management was socially and ideologically unacceptable. When profits were high the workers received additional compensation in the form of durable goods such as color TV sets and refrigerators because money wage had to follow a fixed scale nationally. The additional reward was not dependent on additional effort. Third, investment policy might not be optimal in the sense that risk taking by a manager was not sufficiently compensated. Fourth, the quality of the managers was poor in general because they were not trained under a free enterprise system. Bureaucracy and personal connections determined the selection of manager to a considerable extent.

Significant steps on state enterprise reform were taken in the late 1990's as stated in the important report of Party Secretary Jiang Zemin to the Congress of the Communist Party in September 1997. The government was to give up ownership and control of small and medium sized state enterprises while keeping the control of large enterprises. Shares were issued for a small or medium enterprise, to be purchased by its managers and staff. The state would give up most of its shares. This would help an infusion of capital to the enterprise. In many instances, the incentives provided to the workers who share a part of the profits were significant.

The large enterprises can be transformed to various forms depending on the circumstances, but most of these enterprises were to become shareholding companies of one kind or another, with the state controlling the majority shares. Changing the form of ownership on paper alone could not and does not make the enterprise efficient. First, the management itself may not be improved. The lack of qualified managers of modern corporations in China cannot be resolved by such reform. Second, many managers were still selected by personal connections under the Chinese bureaucratic system. One manager told the author that the new system did not change the supervision and authority his former bosses. These same people now became members of the board under the new system. The manager also complained that the time spent on committee and board meetings increased under the new system. In some instances, the government was willing to sell the entire enterprise to a foreign investor, especially a person of Chinese decent living in Hong Kong or a South Eastern Asian country. There are examples of successful transformation of large state enterprises but these are in the minority.

2.3. The Open-Door Policy

Under the open-door policy foreign trade and foreign investment are encouraged. China's economy was essentially a closed economy before the economic reform. In 1978, the total volume of its foreign trade, or the sum of the values of its exports and imports, amounted to only 7 percent of its national income. Deng Xiaoping's open-door policy encouraged the opening of China to foreign imports and the promotion of exports. By 1987, the volume of foreign trade increased to 25 percent and by 1998 to 37 percent of gross domestic product. A number of institutional reforms were introduced in the administration of foreign trade, beginning with strict control for the purpose of providing exports to pay for the imports required under central planning. The provinces were given autonomy to promote exports. Trading companies were established in cooperation with industrial enterprises manufacturing products for export to facilitate decentralization of trading activities. These companies were responsible for their own profit and loss.

Special treatment was given to exporting companies and enterprises to encourage them to export. They were allowed to retain part of the foreign exchange they earn and to obtain special loans in RMB or in foreign exchange for short-term financing or long-term capital expansion. After 1981 a more favorable exchange rate was granted to exporters in exchanging the foreign currency earned for RMB. For example, in 1981, while the official exchange rate was 1 U.S. dollar for 1.6 RMB, the more favorable rate was 1 to 2.8 RMB. In addition, several coastal provinces, including Guangdong and Fujian, established export-processing zones. Foreign investors were encouraged to set up factories in these zones, independently or jointly with Chinese enterprises, to process imported or locally produced materials for export. No import duties were levied on materials processed for exports. A main purpose was to absorb Chinese labor while using the capital and technical knowledge of the foreign investors. The use of export-processing zones to promote exports had been found to be successful in Taiwan, which had established the Kaohsiung Export-Processing Zone in December 1966 (see Li, 1976, pp. 352-358). Also, joint ventures with foreign investors outside the export-processing zones were established. These developments were relevant not only to China's foreign trade but also to foreign investment in China.

Turning to foreign investment, the second component of the open-door policy, we observe that the Chinese government make an almost 180 degree turn from regarding it as a form of capitalist exploitation to utilizing it as an important engine for economic development. First, in 1982 the well-known Shen-zhen economic zone bordering Hong Kong began to be opened. Infrastructure was build. Foreign investors could set up factories there to take advantage of the inexpensive and skilled labor and pay them at market-determined wage rates different from the rates prevailing in other parts of China. They also received special tax breaks. In less than one decade Shen-zhen developed from a piece of farmland to a modern city. Because of the difference in economic opportunities, citizens of China could enter Shen-zhen only with special permission. Soon other economic zones and special areas were opened for the convenience of foreign investors. Direct foreign investment can take three forms, jointly financed enterprises, cooperative ventures and entirely foreign-owned enterprises, the first and third being of approximately equal in amount in 1998, and the second being about half in amount. Foreign investment increased from an annual rate of less than one billion US dollars in 1978 to nearly 30 billion in 1998.

While we note the effort of the Chinese government to promote foreign investment, one has to understand the restrictions on foreign investment. As in other areas of economic reform, including reform of state-owned enterprises, of the banking and financial system and of foreign trade, many Chinese government officials do not view the market economy in the same

way as economists who believe in the economic benefits of free trade and free capital flows. They see certain elements of the market economy as useful in promoting China's economic development and modernization while believing that the government should exercise an important role in regulating the market forces. The government encourages certain categories of investment selected as important for economic development while it discourages and even prohibits other categories. The categories to encourage include those useful for new technology in agriculture, in the production of energy, transportation and vital raw materials, and in renewing resources and prevention of environmental pollution. Direct foreign investments are encouraged for the technological upgrading of traditional industries and of labor-intensive industries.

Another aspect of the barriers to foreign investment is the complicated procedures involved. Many government bureaus and government officials claim jurisdiction over a proposed investment project, and their approvals are needed. Foreign investors often are unfamiliar with the Chinese ways of conducting business transactions. Personal relations through *Guanxi* can be more important than formal contracts signed. The legal system is deficient from the viewpoint of a Western investor, although investors from Hong Kong, Taiwan and Japan are familiar enough with the Chinese legal and social system to conduct business effectively.

2.4. The Price System

Reform of the price system was undertaken as a part of the Decision of the Central Committee on Economic Reform adopted in October 1984, which covered the previous three components as well. The main objective was to decontrol the administratively determined prices gradually and allow prices to be determined by market forces. Without market determined prices the state enterprises do not receive correct signals to do its economic calculations in the choice of inputs and the planning of outputs. However, the administered prices cannot be decontrolled immediately. First, there is the problem of equity. To allow the prices of basic consumer goods to increase would affect the welfare of consumers who were subsidized. Second, there would be disruption in production of state enterprises, which were supplied with low-price inputs under the planning system. A compromise solution was to introduce a two-tier price system. One set of prices remained the same as before. A second set of prices for the same goods can be determined by the market. The state enterprises could still purchase the allotted amounts of inputs and sell given amounts of outputs at the administered prices as before. In addition, each enterprise can purchase additional inputs and sell above quota outputs at prices determined by the market.

The two-tier price system provides incentives for enterprises to economize on its inputs and to increase its outputs for profit. It can sell additional outputs at market prices. Under this system, if certain outputs were desired by the market beyond the amounts that could be produced using the centrally allocated inputs, prices would go up and the producers could produce more using more expensive inputs supplied in the market. In producing more outputs the enterprises had to pay for the inputs at market prices and thus had to economize on the use of inputs. Since only the prices of outputs sold at the margin and the prices of inputs purchased at the margin affect the margin revenue and marginal cost of an enterprise, optimal economic decisions of the enterprise can be made on the basis of these prices. To receive given quantities of inputs at below market prices is equivalent to receiving a fixed amount of government subsidy. Having to surrender a given quantity of output at below market price amounts to paying a lump-sum tax. Neither a fixed subsidy nor a lump-sum tax affects the optimal output and input decisions of the firm. Hence the two-tier price system practiced in China in the 1980's was an economically efficient system, given that the existing enterprises had to continue producing. A possible economic inefficiency could result, from the viewpoint of the functioning of a market economy, if certain enterprises were operating at a loss without government subsidies and should discontinue operation. As time went on the administered prices were gradually changed to coincide with the market prices and the two-tier price system was no longer needed.

The two-tier price system was also practiced in the case of urban housing. In the early 1980s, the rent for housing supplied by the units to their employees, which included practically all of urban housing, was extremely low, in the order of several yuan per month for an apartment. Urban rent was adjusted upward very gradually until the turn of the century when most of urban housing was privatized. In the mean time there was also a two-tier price system as public, private and foreign developers were allowed to build apartments to be sold at market prices for those who could afford them. Urban workers maintained their apartments assigned to them by their employers, or units, at low prices that were gradually increased with increasing wages. Ownership of these housing units was transferred to them at below market prices and with subsidy in the form of low mortgage interest rates. Through this process of commercialization (so-called by the Chinese in lieu of the term privatization) the price of all housing will become market determined.

2.5. Development of Non-State Sectors

The fifth component of reform is to foster the development of the non-state sectors. Besides the state enterprises there are three other types of enterprises in China: collective, individual and overseas-funded, the last

having been established under the open-door policy. Collective enterprises include urban collectives and rural collectives. Some previous state-owned retail stores and small factories in urban areas were transferred to collective ownership. To make the operation of retail stores more efficient they were leased to private or collective owners who operated the store for profit, although the real estate remained state-owned. The operation resembled that of a restaurant owned by partners or individuals who rent the space. New collective commercial and industrial enterprises were formed in urban areas.

Township and village enterprises in rural areas were established with the support of the local governments that desired to increase revenue. There were opportunities to make money as income increased after the successful reform in agriculture. Unemployed labor could be used for non-agricultural production. Local governments had the land, capital and human resources to establish these enterprises. They had connections to cut through red tapes that were required to set up and run such enterprises. As China did not have a sound modern legal system the personal position of an influential local government official was important to make sure that contracts were honored. Ownership rights of these enterprises were often unclear, and yet they seemed to function well and were profitable. The phenomenon of their success provides a puzzle for economists.

The collective and private sectors grew much more rapidly than the state sector. *China Statistical Yearbook 1997*, p. 413, provides the following data on gross industrial output value by ownership, in billions of current yuan.

	State-owned	Collective owned	Individual-owned	Other Types	Total
1978	328.9	94.8			423.7
1985	630.2	311.7	18.0	11.7	971.6
1996	2836.1	3923.2	1542.0	1658.2	9959.5

From these data we can see that in 1978 individual and other types of industrial enterprises were non-existent and state enterprises produced 328.9/423.7 or 77.6 percent of total gross industrial output value. By 1985, the share contributed by state enterprises was reduced to 630.2/971.6 or 65 percent. It was further reduced to only 28 percent in 1996 as compared with 39 percent contributed by collective enterprises. One important conclusion to be drawn from these data is that even if the state enterprises are not increasing their productivity China's economy can continue to grow rapidly if the non-state sectors remain vibrant because the state sector accounts for only a small share of the total output.

2.6. The Banking and Financial Sector

When the planning system was being changed from “compulsory” planning to “guidance” planning as stipulated by the October 1984 Decision of the Central Committee of the Communist Party a macro-economic control mechanism was to be introduced which required a more modern banking system. Before economic reform, the People’s Bank was a mono-bank that had branches to accept deposits from the public. Its other functions were to issue currency and to extend loans to state enterprises according to the need specified and approved by the planning authority. It had no authority to decide on these loans. Commercial banks did not exist in the sense of being able to extend credits to enterprises according to the criterion of profitability. In 1983 the People’s Bank was nominally transformed into a central bank. Specialized banks, including the Industrial and Commercial Bank of China, Agricultural Bank of China and the People’s Construction Bank of China, were established and given some autonomy in the extension of credits in the early 1980’s in the same way that state industrial enterprises were given autonomy to make production decisions. This led to the rapid increase in the supply of currency (since the central bank had to honor the loans extended by the specialized banks) in 1984 by 50% and an inflation rate of 8.8% by the overall retail price index in 1985.

Reforms of the banking system to serve a market economy (as the Central Committee of the Chinese Communist Party declared China’s economy to be a socialist market economy in October 1992) progressed gradually in the late 1980’s and early 1990’s. In November 1993, the Third Plenum of the 14th Central Committee of the Communist Party decided to accelerate reform of the financial sector by giving more independence to the People’s Bank as a central bank and transforming the specialized banks to commercial banks. Two significant dates are March 18, and May 10, 1995, when the People’s Congress passed respectively the Law on The People’s Bank of China (effective on the same day) and the Commercial Banking Law (effective July 1, 1995). Although there the provisions of these laws were not actually carried out in practice, the laws provide a blueprint for the banking system and serve as a convenient framework for us to understand the working of the system. Banking reform is one important example to demonstrate the rule that institutions cannot be changed by legislation alone.

Besides the banking system, other financial institutions were changed. In 1981 the government formed the China International Trust and Investment Corporation (CITIC) to attract foreign capital. Similar investment trusts under the sponsorship of provincial governments followed. Stock markets in Shanghai and Shenzhen were established in the early 1990s. As pensions will be provided under a new social security system, pension funds will become an important source for savings and investment. The domestic insurance business, after being suspended for over twenty years, was

reopened. Foreign insurance companies have been allowed to operate in China. The financial sector can be expected to expand further as foreign companies enter under the provisions of the WTO.

2.7. Economic and Social Infrastructure

In particular the economic and social infrastructure includes the education system and legal institutions.

Concerning the education system, while China had a combination of private and public schools at all levels before 1949, the education system was drastically changed in the early 1950's. All schools were brought under government control, with private schools and universities taken over by public educational organizations. Higher education was modeled after the Soviet education system. Universities were broken up into colleges specializing in technical training. The special technical schools were administered by the government units requiring the services of their graduates. The executive branch of the Chinese government had thirty some ministries functioning under the system of central planning, with each ministry in charge of the production of a major product. Each such ministry also operated technical schools to train the staff needed. The operation of the education system was seriously interrupted by the Cultural Revolution, with many colleges and universities closed and school enrollment drastically reduced.

Ever since economic reform started China's educational system quickly returned to normal and began to improve. Universities were opened after the interruptions of the Cultural Revolution. Students were given opportunities to take examinations to enter universities and graduate schools. Intellectuals who had been criticized and mistreated were restored to their previous status and given due respect. People were eager to learn. Students seized upon their educational opportunities and studied diligently. The population as a whole wanted to absorb new ideas and knowledge from the outside world since they had been deprived of such knowledge when China was closed to the outside world. Foreign scholars and professionals of all kinds were invited to China to lecture, in schedules so full that even enthusiastic lecturers became exhausted. The Ministry of Education, or the State Education Commission from 1985 to 1998, sponsored programs to cooperate with foreign educational institutions to improve education in China. At the same time individual universities were given the freedom to invite foreign scholars to lecture and they did so effectively. Students were sent abroad to study, and were permitted to go abroad by their own initiatives. Modern textbooks were adopted in university courses. Efforts were made to translate modern texts into Chinese and to write new texts in Chinese. As time went on, the skill in modern languages especially English improved rapidly and texts in English began to be adopted.

Education policy was changed. At the university level, the Soviet style of specialized and separate technical education was changed back to a more liberal and broad-based education offered by more comprehensive universities. Privately initiated and funded educational institutions flourished since the beginning of reform and were encouraged by the government in the late 1990s. Such schools were established by the education minded Chinese population everywhere in the country. In the rural areas, farmers who have become richer want to improve the education of their children by starting primary schools. In urban areas, some educators and entrepreneurs see the need or market demand for higher education and establish professional schools and even colleges. Privately funded schools of all levels from primary schools to colleges and professional schools have received support from overseas Chinese also.

The government has made a serious effort to modernize the Chinese legal system. This effort was motivated by the agenda to modernize China and the need to cooperate and deal with the international business community, especially foreign investors. The Ministry of Education in the early 1980's began to set up programs for legal education. The record of the government's effort to modernize the legal system has been impressive. The People's Congress has functioned more independently of political influence and has legislated a large number of laws required for the functioning of the market economy. Examples are the Central Bank Law and the Commercial Bank Law mentioned earlier while discussing the reform of the banking system. There are bankruptcy laws, other laws governing corporate behavior, and laws governing foreign trade and investment, among others. The power of the People's Congress further increased in the late 1990s when Li Peng served as its Chairman as Li was the second most powerful leader in China, next to President and Party Secretary Jiang Zemin. The judicial system expanded. Supreme People's Court in Beijing has the power to give judicial interpretation of law. The Litigation Law allows citizens to sue the government. The courts are deciding more cases, including suits against the government. In 1998, the number of judicial personnel was over 300,000, including approximately 130,000 judges and 175,000 lawyers. All these developments signaled the modernization of the Chinese legal system.

The impressive record just described does not imply that the Chinese legal system is in well functioning. How well the Chinese legal system functions cannot be judged by the large number of new laws having been legislated or by the number of lawyers, of judges, or of law suits that have been filed. Formal legislation itself is not sufficient to provide social and economic order. Laws have to be based on moral standards accepted by the population. Some observers suggest that the number of new laws passed by the People's Congress is too large and that the contents of many laws do not take into account sufficiently the moral foundation and historical

tradition of social behavior on which any laws must be based. On paper the Chinese laws today are quite comprehensive and modern in content, but the behavior of the Chinese people has not changed greatly simply on account of the enactment of the new laws. The government deserves some credit in promoting orderly behavior besides the reform of legal institutions.

2.8. Social Welfare System

Side by side with the development of market institutions, the social welfare system was and is still being transformed. The system covers mainly health care and social security. Before economic reform China had a comprehensive and effective health care system. In the country side under the Commune system health care was provided by a three-tier system that was financed and administered locally. The first tier consisted part-time bare-foot doctors who provided preventive and primary care. For more serious illness, they would refer patients to the second tier, commune health centers that might have ten to thirty beds and an outpatient clinic staffed by junior doctors and serving ten to twenty-five thousand people. Patients with more serious illness were referred by the commune health centers to the third tier, the county hospitals staffed by senior doctors. This system no longer functioned properly as the Commune system was dissolved in the early 1980s. Bare-foot doctors began to work full time in farming or to set up their own private practice. Demand for better health care by richer farmers was satisfied partly by services outside the system. The quality of health care services currently provided and financed by the local governments is considered by some observers to be worse than before. Such view might be colored by observing the low quality received by the poor as compared with the rich who obtain services from the market. The care provided to the poor might not be worse than before while the average quality might even have improved. In any case there remains a three-tier health care network which had over two thousand county-level hospitals, 50 thousand township-level hospitals and 730 thousand village-level clinics in China in 1999.

The urban population received their health care services in one of two insurance systems, the Government Insurance Scheme (GIS) and the Labor Insurance Scheme (LIS). Financed by government budgets, GIS covers government employees, retirees, disabled veterans, and university teachers and students. LIS covers state enterprise employees, retirees and their dependents. Each participating state-owned enterprise sets aside an amount equal to 11-14 percent of total wages as a welfare fund to finance health expenditures incurred by its LIS beneficiaries. In 1993, GIS and LIS respectively covered about 9 percent and 40 percent of the urban, or 2.5 and 11.7 percent of the total population according to an official National Health Survey. Both GIS and LIS beneficiaries obtain medical services

from public hospitals, and the fees are reimbursed. Since beneficiaries can receive largely free outpatient and inpatient services, and the doctors received a fixed wage regardless of the services provided, there are wastes on the demand side and low incentives to provide good services on the supply side. The Chinese government is in the process of designing a new health insurance system to reduce wastes and improve the quality of services.

Concerning social security, the services which were previously provided by the state enterprises to their own workers and staff (including those in the supporting facilities such as schools for children and hospitals) could no longer continue after the reform of state enterprises. A new system is in the process of being instituted. On unemployment compensation and retirement support, workers and enterprises are expected to contribute jointly to a fund that can be used when the need occurs. Private insurance companies are expected to play a supplementary role in the provision of health care and other social security services.

3. CHARACTERISTICS OF THE REFORM PROCESS

China's economic reform was often distinguished from the market reform of the Soviet Union and many former socialist countries in Eastern Europe. First, unlike the case of the Soviet Union, China did not change its political system and was able to maintain political stability. Second, China's reform process did not have a blueprint. Each step was taken after drawing the experience of the previous step. As Deng put it, the process was like a person walking across the river by feeling the rocks in each step. This characteristic was necessitated by the lack of knowledge of what kind of market economy was suitable for China on the part of the leaders. They had to learn by experimentation. Secondly, experimentation helped convince the party members of the validity of the new institutions. The slogan "to build an economic system with Chinese characteristics" was introduced in the early 1980's and remains in constant use in the early 2000's. "Chinese characteristics" mean the results of experimentation that are shown to work for China. This slogan also implies that the Chinese leaders are pragmatic and not confined to a set of old Communist ideology. Recall Deng's famous statement, "it does not matter whether a cat is black or white as long as it catches mice." Pragmatism over ideology is an important trait of China's reform process.

Previously provided examples of reform measures that resulted from experimentation include the "household responsibility system" in agriculture, autonomy and the "contract responsibility system" for state industrial enterprises, the free economic zones as experiments for foreign trade and investment policies, and the introduction of share-holding companies in General Secretary Jiang Zemin's report of September 1997 partly as a re-

sult of the successful experience of some small and medium sized state enterprises that was initiated by the individual enterprises themselves.

The third characteristic of the reform process, related to the second, is that the steps were taken one after and thus gradually and not all at once. In the economics literature this is called “gradualism” versus “shock therapy.” “Gradualism” has worked for China, but the author is not in a position to assert that it is better than “shock therapy” in general, or for the former Soviet Union and Eastern European countries for lack of knowledge. The above only stated the reasons why political stability, experimentation and gradualism worked for China. A reader who is more knowledgeable about other formerly Socialist countries may decide for herself whether above reasons are applicable to some of these countries as well. One advantage of China’s economic condition over that of the Soviet Union at the early stage of reform was that the Chinese farmers knew how to farm as private farmers. Collective farming was introduced under the Commune System only in 1958, twenty years before the reform. The farmers still remembered how to farm and they also had had some practice in 1963-65 during the president of Liu Shaoqi who introduced some elements of private farming after the economic collapse of the Great Leap Forward Movement of 1958-62. On the other hand collective farming had been introduced in the 1930’s, some sixty years before the reform of the Soviet economy in the early 1990’s. Russian farmers did not know how to farm as individual farmers. The large increase of agricultural productivity in China served as the basis for further economic growth and reform.

4. WHY WAS ECONOMIC REFORM SUCCESSFUL?

Success in China’s economic reform was measured partly by its rapid economic growth in real GDP in the order of about 9.5 percent annually in the two decades after 1978. In the mean time there were significant changes in economic institutions as described above. The following factors account for the success. Note that economic growth was important for carrying out further economic reform. Without growth, reform would not and could not have proceeded because the reformers would have lost confidence and the support of Communist Party members and the Chinese people. The first two factors stated below account for the rapid growth once the basic elements of a market economy were introduced. By basic elements I mean the freedom and opportunity to make money on the part of Chinese citizens by hard working and ingenuity, with rewards dependent on ability and effort, and economic success dependent on superior performance under a somewhat competitive environment.

First, the basic elements of a market economy as stated above was successfully introduced or adopted by the Chinese government in the initial

stage of reform. Even when there were a number of institutional shortcomings in the form of state control, lack of competition, and bureaucratic interference in the market economy, the Chinese people were able to get rich by hard working and entrepreneurship.

Second is the large amount of human capital in China. The human capital was imbedded in the Chinese culture and had been accumulated and developed for at least several thousand years. The Chinese already knew how to make beautiful bronze vessels during the Shang dynasty in 2000 B.C. as we find in art museums. A market economy was functioning and well documented as of the Han dynasty some two thousand years ago. The silk route to Rome, having been opened during the Han dynasty, was in very active use in the Tang dynasty of 300's to 600's A. D. China's civilization is the world's longest living civilization, unlike the ancient Egyptian and Greek, or the Persian in the middle age. The same talent that was used to make bronze vessels and conduct business in a market economy has evolved and improved to enable the Chinese workers and entrepreneurs to excel. The cultural factor cannot be ignored. The investment in human capital has taken place for a very long period and for the society as a whole. Its importance is no less than family and school education for an individual during a much shorter formative period in her life. If the latter type of investment in human capital can benefit an individual, why would the former type of investment in human capital not benefit a society? Conclusive evidence of the value of Chinese human capital can be found in the excellent economic performance of the people with Chinese culture in many Southeastern Asian countries.

The third is the competence of Chinese leaders in carrying out economic reform. The able leadership of Deng Xiaoping and Zhao Ziyang, premier in the 1980s, should be mentioned. I believe that the first two factors are sufficient for the success, given a certain amount of political stability. The third is supplementary. Without the particular able leaders just mentioned reform would have started and have been successful, though perhaps more slowly. The four conditions for the initiation of economic reform stated at the beginning of this paper made reform inevitable. Once started, the market institutions, however imperfect, and the Chinese human capital were sufficient for the success.

5. SHORTCOMINGS OF CHINA'S ECONOMIC INSTITUTIONS

Consider first the Chinese state enterprises. After the restructuring process in the late 1990s, many small and medium size enterprises appeared to behave more like enterprises of similar size in a less developed capitalist market economy. The reason is that the system of management and

worker compensation and other incentive conditions are similar. The incentive system for the management of large state enterprises was not yet resolved. The managers were still underpaid. They were bureaucrats appointed by the board of directors that consisted of the same government and party officials as before. The government board had neither incentives nor ability to monitor the behavior of the enterprise managers. It is alleged that political considerations entered heavily in the appointment of large state enterprises, and that foreign competition from China's membership in the World Trade Organization was brought in to force the inefficient state enterprises to improve their performance.

The difference in economic efficiency observed for many small and medium sized state enterprises and for large state enterprises can be characterized by the following propositions. First, many small and medium sized state enterprises have been privatized in the sense that most shares are in private hands and that the enterprise is truly financially independent and cannot rely on government subsidies. Second, many large state enterprises are still government owned, are managed by government bureaucrats, and can depend on government subsidies. Third, the mere restructuring of almost all state enterprises to become share-holding companies does not guarantee efficiency if the government owns a majority of the shares and if the bureaucrats in the governing board and in the management of the enterprises have sufficient monopoly power to collect economic rents to benefit themselves without having to earn profits for the enterprise. In the process of solving the problem of economic efficiency of state enterprises by downsizing their staff and workers, the Chinese government has to deal with the problem of increasing unemployment that is serious in provinces in the Northeast with high concentration of state enterprise.

Secondly, consider the banking system. The degree of competence of the banking staff, the organization and incentive system in the banks, and external influences are three sets of factors affecting the functioning of the commercial banks. The first was pointed out before. Regarding the second, as the largest four commercial banks are state-owned and state-managed organizations they are subject to some of the inefficiencies of state enterprises. Incentive problems for the management and the staff, inability to discharge workers, and bureaucratic behavior among the staff are all present. Attempts to reform state enterprises have not been very successful. The reasons include the difficulty in designing a reward system suitable for the managers of large enterprises (the responsibility system, leasing the enterprise to the management works better for small enterprises), inertia in changing the bureaucratic behavior of the staff, including the privileged loan officers and even the bank officials receiving deposits, and the unwillingness to discharge inefficient workers as job security was a part of the social welfare system. Bureaucratic behavior includes not only poor

services to customers, but corruption and misuse of bank funds for illegitimate purposes. However, as state industrial enterprises have improved their efficiencies (see Jefferson and Rawski, 1994, p. 56), presumably the commercial banks in China have also. More evidence on this subject is needed. Another weakness of the commercial banking system is the lack of adequately supervision by the People's Bank. In addition to the above stated institutional weaknesses, the Chinese state commercial banks are burdened by a large amount of bad loans, in the order of some one trillion yuan in 1998 (see Chow (2002, p. 229)). These bad loans are the results of borrowing by state enterprises partly authorized by the planning or higher government authorities and partly decided upon by the commercial banks themselves in lack of banking experience or under political pressure. In 1999 the government set up four asset management companies (AMCs) to restructure the non-performing loans but the effort was not entirely successful.

Third is the foreign trade and investment policy. Foreign trade is characterized by high tariffs. Foreign investment is subject to numerous restrictions and the need on the part of foreign investors to deal with a complicated bureaucratic system controlling foreign investment. The shortcoming in the above three areas prompted the Chinese government to push for membership in the World Trade Organization which was finally approved in January 2002. The lowering of tariffs and the permission of foreign manufacturing and financial firms to enter the Chinese market more freely under the terms of WTO membership would force the state enterprises, the banking system and the institutions for foreign trade and investment to improve. While foreign trade transactions are fairly open, foreign capital movements are still restricted. The experience of the Asian financial crisis of 1997-9 led some economists and policy makers in developing countries to be more cautious in opening its capital market. The Chinese government has always taken the stand to open the foreign capital market gradually.

Fourth is the bureaucratic system. The system affects the efficiency of government institutions including state banks and state enterprises as we have pointed out. It also affects the functioning of collective, private and foreign operated or jointly operated enterprises that have to deal with the bureaucracy. One aspect of bureaucracy is corruption, which the Chinese government has tried very hard to control. Because of the temptation of large economic gain, the control of corruption is difficult.

Fifth is the Chinese legal institution that is not yet modernized. We can cite three shortcomings of the Chinese legal system. First, as pointed out previously economic behavior is not changed by legislation alone. It is the result of cultural tradition and social institutions. There is inertia in changing social and human behavior. Being law abiding is a habit that is difficult to change. People do not yet develop the habit of going to courts

to settle disputes. Many do not have high regard for laws and are not law abiding. Laws are often violated in China, especially laws regarding international patents and intellectual properties. To enforce such laws, just as to control corruption, is very difficult because the economic temptation is very large.

Second, in some respect the effort to introduce western laws have affected orderly social relations adversely. In traditional Chinese society, such relations are based on the tradition of *guanxi*, or social networking. The Chinese consider ethical and moral values more important than laws. They feel justified if they behave properly according to their conscience, which comes from family education and social values. To the extent that orderly behavior based on such values is disturbed by a legalistic attitude, it may be harmful to society.

Third, the Communist Party in its role to provide political leadership is in some sense above the law. There are two senses in which this statement is true. First, laws cannot be written to restrict the power of the Communist Party to rule the country that is absolute. Second, in practice even when the law applies, the courts might decide according to the wish of the government official or Party member who is a party of the dispute.

It is interesting to note that most of the shortcomings of the existing Chinese economic institutions are remnants carried over from the period of economic planning. They are the shortcomings of the bureaucratic economic institutions that were founded by the government of the People's Republic of China. The state enterprises were established after 1949, and so were the People's Bank and the affiliated branch banks. These state-operated organizations have had shortcomings that did not exist before 1949 in the private industrial enterprises and private banks in China. Foreign trade and foreign investment had not been under such state control as during the planning period. The bureaucratic system that interferes with the functioning of the market economy today are much worse than the weaker bureaucracy in the 1930's. Without being subject to the principle of supremacy of the Communist Party, the need of the Party to exercise strict control over the population, and the experience of the Cultural Revolution that destroyed much of the moral foundation of society, the legal system in China before 1949 was also functioning better than today.

It would be inaccurate to attribute all the shortcomings of the present-day economic institutions in China to the behavior of the bureaucrats. The difficulty to change economic institutions is also caused by the behavior of the staff and workers who have gained entitlement under the current system, including job security, welfare benefits and low rent for housing. Reform of economic institutions would affect all the benefits received. Furthermore, even in other countries not having had the experience of central planning, institutions are difficult to change because people in general have

developed habits under the old institutions and do not like to adapt to new modes of behavior. The resistance to change is enforced by the difficulty in learning new methods to operate and function in modern economic institutions. The required education and investment in human capital is a slow and sometimes painful process.

In short, after economic reform the economic institutions in China have improved a great deal for the functioning of a market economy but on the whole are still not up to the standard of the imperfect market institutions that had existed. It is not easy to dismantle a whole bureaucratic system that controlled the major economic institutions even under an enlightened government staffed with fairly able officials. The economic entitlement of the population in the pre-reform system, the difficulty to change working habits and the slow and possibly painful process of education and training that is required to function in a modern market economy all contribute to the shortcomings of the existing Chinese economic institutions.

6. WHAT ACCOUNTED FOR THE RAPID GROWTH OF CHINA'S GDP?

I will try to answer this question by using the standard national income growth accounting based a Cobb-Douglas production estimated by using Chinese official data.

First, a word about the accuracy of Chinese official data. In Chow (1986) I tried to address this issue. Like statistical data of other countries, some data are more reliable than others. For example, data on the wage rate, employment in state enterprises, consumption expenditures of urban residents during the period of central planning are probably reliable because the government needed these data to set production targets and to issue ration coupons. Data on population are moderately reliable and have been improved since the early 1980s when China received technical help from the United Nations to improve its population census. On the possible falsification of data, the extent is limited. During the Great Leap Forward Movement of 1958-59 Chairman Mao wanted the communes to achieve unreasonably high output targets and some communes did falsify their output data. However when the local offices of the State Statistics Bureau received these inflated output data they adjusted them downward, for it is the duty of an official of the Bureau to report data accurately and honestly. Some officials may not succeed in this mission, but they all have a responsibility to do so. Pressure on the communes to achieve high output targets does not apply to them. The reliability of the data is also affected by the competence of these officials. They may not be as well trained as those in economically more developed countries.

Reliability should be judged also by the purpose of the user. For example, national income data may not be very accurate in the levels but accurate enough to measure the average rate of change during a long period. In general Chinese official statistics are accurate enough for econometric analysis as demonstrated by numerous examples given in Chow (2002). For national output data in 1998-2000, some observers have questioned whether they are overestimates because of political pressure to achieve national output targets after the onset of the Asian financial crisis. Without carrying on a debate on this issue, I like to point out that even if national output data could be overestimates for a short period such overestimates cannot lead to an erroneous picture the rate of growth for a long period which even a casual observer can verify by the generally available data on outputs and consumption of major commodities. A skeptical view on Chinese official statistics can be found in Yeh (2001) which also provides projections of future growth as we will discuss at the end of this section.

For the estimation of an aggregate Cobb-Douglas production function, official data are readily available on national income and labor force. Data on capital stock were constructed and an aggregate production estimated in Chow (1993). This study was updated in Chow (2002) under the statistically supported assumption of constant returns to the two factors. It was found that, after the abnormal years of 1958-69 during the Great Leap and the Cultural Revolution were omitted, a regression of $\ln(\text{output}/\text{labor})$ on $\ln(\text{capital}/\text{labor})$ and a linear trend yields a value of about 0.6 for the first coefficient, zero for the second coefficient in the period 1952-1978 and 0.028 in the period 1979-1998. The difference between the last two coefficients shows clearly that the rate of increase in total factor productivity increased substantially, from zero to 0.028, after economic reform started. Since the two independent variables in this regression are highly correlated, one might question the accuracy of the two coefficient estimates. However, if independent evidence supports the accuracy of one estimate the remaining one will also be accurate since the inaccuracy arises in the attribution of the observed growth of the dependent variable to the two independent variables. There are three pieces of additional evidence on the capital exponent of the Cobb-Douglas production function: 1) a regression of $\ln(y/L)$ on $\ln(K/L)$ for state enterprises in the 50's to 70s as found in Chow (1985, p. 123) gives a coefficient of 0.6; 2) Mankiw, Romer and Weil (1992) have provided an estimate of the capital exponent in a Cobb-Douglas production function of about 0.6 using data for a number of developing economies and 3) Buck (1930) provides an estimate of 0.4 for the average share of labor in the output of some 2,866 Chinese farms included in his survey. If the capital coefficient is accurate the estimate of the rate of increase in total factor productivity after 1979 can be considered reliable.

Using the estimated Cobb-Douglas production to account for the average rate of growth of 9.6 percent annually from 1978 to 1998, we attributed 0.028 to the growth in total factor productivity, 0.6 times 0.1 or 0.060 to the growth of capital and 0.4 times 0.02 or 0.008 to the growth of labor. Thus capital formation was the most important factor contribution to growth in the two decades after reform, while change in total factor productivity is second in importance. The large contribution of capital formation is derived from the large capital coefficient of 0.6, but also from the high rate of growth of capital stock in the order of 0.1, which is based on a high saving rate of about 0.34. Since $0.1 = [K(t) - K(t-1)]/K(t)$, the result can be obtained by assuming saving or investment in the numerator to be 0.34 times output and $K(t)$ in the denominator to be about 3.4 times output. If the saving rate is reduced by half to .17, still a very high number by the standard of Western developed economies, the rate of growth of capital stock will be reduced to 0.05, and capital growth will contribute to 0.6 times 0.05 or only 0.03 to China's growth rate, which will be reduced from 9.6 percent annually to only 6.6 percent annually.

To use the estimated Cobb-Douglas production to project economic growth, I have employed two additional assumptions: 1) an investment/output ratio of 0.34 based on the average rate for 1978-98 and the persistence of similarly high ratios for several Asian economies such as Japan, Taiwan and South Korea, and 2) a rate of growth of labor force at 1.1 percent annually. The second assumption has little effect on our estimate of the future growth rate since the labor coefficient is only 0.4, and the contribution of labor is only 0.4 times 0.011 or 0.0044. An error in the assumption for the labor growth rate is insignificant. By a projection using the above production function and the two assumption one reaches the conclusion that China's real GDP in 1998 purchasing power would exceed that of the US, given the initial condition in 1998 that the Chinese real GDP in purchasing power terms as defined by the World Bank was half that of the United States. The same conclusion is reached by using the annual rates of growth projected by the World Bank's *China:2020*, which equals 6.9 percent in 2001-2010 and 5.5 percent in 2010-2020.6 by a separate calculation of the World Bank.

Skeptical views on the accuracy of Chinese official statistics can lead to different estimates of parameters of the Cobb-Douglas production function and to different projections of future growth. However, the following conclusions remain valid under different assumptions about Chinese data as provided by Yeh (2001). First, the rate of growth of real GDP in the two decades after reform was substantial, say around 6 to 7 percent, even if it was not as high as 9.5 percent according to official statistics. Second, capital formation was the main factor contributing to growth. Third, there was a substantial increase in total factor productivity. Fourth, future growth

in the first two decades of the twenty-first century, though expected to be somewhat slower, will remain fairly substantial.

7. FUTURE PROSPECTS OF REFORM AND GROWTH

Institutional reform can be expected to be slow, but the rate of economic growth will be substantial in the next decade or two. Rapid economic growth will result from the abundance of high-quality Chinese human capital operating in an adequate, though defective, market economy.

Three set of forces are at work that will affect China's future growth: 1) dynamic forces of Chinese market economy, 2) the positive role of the government in maintaining and reforming the market institutions, and 3) institutional inertia. Their combined effect is expected to be positive since the first two will remain to operate while the third is limited in its effect, as this has been demonstrated in the past decade.

To elaborate on the three sets of factors, consider first the market forces. We can expect that private enterprises, including foreign-owned enterprises and joint ventures, under a better legal system and in the environment of a more open economy with China entering WTO, will contribute positively to growth up to 2020. These enterprises will play the role of township and village enterprises in serving as the most dynamic sector of the economy. They also will provide competition to the state and collective enterprises, making them more efficient.

Concerning the role of the government, experience of the last twenty years has demonstrated that the government has played and can play a positive role in promoting economic growth. Its main achievement is to adopt institutional changes, which allow market forces to operate for the benefit of the economy. The household responsibility system provided incentives for the farmers at the beginning of economic reform. The energy of township and village enterprises accounted for much of the growth in the 1980's and early 1990's. The open-door policy allowed foreign investment to contribute to growth through the import of capital, technology, and managerial training. Foreign and domestic competition forced state enterprises to improve their efficiency. It is true that the government has made some mistakes in macroeconomic policies, contributing to inflation in 1988 and 1994. Yet through years of experimentation and learning Chinese government leaders have reached a better consensus about the efficacy of the market system and government officials have learned more about how the Chinese market economy functions. Such consensus and experience will help promote further growth. In addition the government is engaged in infrastructure building.

Third, there will be continued inertia in economic institutions, including in particular the state enterprises, the banks, the legal system and in

general ways to operate an economic institution. Economists who believe in rationality of economic behavior as a general principle operating in all parts of the world should not overlook the inertia due to lack of information, lack of education and knowledge, social and political pressure affecting economic decisions, unwillingness to give up entitlements and simply persistence of customs and habits. Such inertia has affected the past rate of growth negatively.

The balance of the three sets of forces at work, the energy unleashed in the essentially market economic system with abundance of human capital, the positive role of the government, and the resistance from institutional inertia is that the economy will continue to grow at a substantial rate, say about seven percent annually, in the first decades, and perhaps 6 percent in the second decade of the 21st century. I have come to this conclusion by observing the data of the past twenty years. The negative factor, namely institutional inertia, has not prevented the economy from growing at an average rate of about 9.5 percent per year from 1978 to 1998. This fact demonstrates that there is no need to have "perfect" institutions to grow rapidly as long as important market incentives are allowed to operate in important parts of the economy. In the future the role of state enterprises in producing total national output will be even smaller than in the past, making further reform in this sector less essential for economic growth.

8. CONCLUSIONS

The topic of this essay is economic reform and growth in China. In summary economic reform consisted of changes in economic institutions toward those of a market economy, with the changes taking place step by step depending on the results of and experience gained in previous steps. Many shortcomings of the Chinese market institutions remain, but rapid economic growth continues in spite of the deficiencies in the market institutions. There is no question that reform has contributed to growth, as evidenced by the comparing the rates of increase in total factor productivity before and after 1978, the former being zero and the latter close to three percent per year. While replacing the previous system of economic planning by market institutions is necessary for growth, it is not sufficient. A second most important factor is the quality and quantity of human capital in China and of the Chinese overseas. By human capital in China I include the cultural tradition of hard work and entrepreneurship, and the high regard for education. Such human capital can be demonstrated by the economic performance of the Chinese in several Southeastern Asian countries. We may draw one important conclusion from China's reform experience that market institutions alone are insufficient for economic development, and human capital is a second most important factor. Market

institutions and high quality human capital are necessary and sufficient for rapid economic development.

As a second conclusion, economic growth can take place under different political systems. If market institutions and human capital are sufficient for economic growth, then growth can take place under different forms of government. In particular, rapid economic growth can take place with or without democracy, as it is demonstrated in Hong Kong and Singapore. Rapid economic growth can occur under a one-party political system as in Taiwan from the 1960s to the 1980s and in Mainland China in the last two decades of the 20th century. The nature of the political system such as Communism is also irrelevant.

Third, China's reform experience shows that enterprises of other form than private enterprises can be economically efficient. There have been efficient state-owned and collectively owned enterprises in China. One important factor accounting for economic efficiency is the existence of competition from other enterprises. Private ownership is not as important as the following two conditions that are sufficient for enterprise management to work hard for the enterprises. The two conditions are first, the manager should not be able to benefit economically without working hard for the enterprise and second, by working hard he or she will be financially rewarded. The first condition can come about if there is competition and if the manager can be held financially accountable. The second condition will result if the manager is allowed to share a part of the profit of the enterprise. These two conditions can serve as the basis for the design of corporate governance.

Fourth, alternative economic institutions can serve a market economy. An interesting phenomenon was the blossoming of township and village enterprises operating without clear property rights and the protection of a well-functioning modern legal system. A market economy can flourish under different legal systems and different forms of ownership structure. The study of a variety of legal systems and of ownership arrangements provides challenges to economists accustomed to observing the functioning of private enterprises under a Western legal system.

Fifth, political feasibility is an important consideration in the adoption of economic reform measures. Political feasibility affects both the general direction of economic reform and the particular steps to be taken in particular areas and in particular times. It was not possible to introduce reform towards a market-oriented economy while Mao was alive or when the Gang of Four, supporters of the Cultural Revolution, was still in power. Entitlement of certain privileges made rapid decontrol of prices and urban rents politically not feasible in the early 1980s.

Sixth, bureaucratic economic institutions under central planning are difficult to abolish.

Agriculture was privatized overnight, but state enterprises and state banks could not be changed rapidly. The success of reform in agriculture seems to favor "shock therapy" as a strategy for reform, but the failure in reforming state enterprises and banks seems to raise doubt on the possibility of a quick transformation. In general it is difficult to change any institution that is controlled by politically powerful bureaucrats who are accustomed to old ways of doing things and to the entitlement of certain economic benefits. The farmers in a household farm were not such bureaucrats. The Commune leaders supporting the household responsibility system did not lose anything by allowing the farmers to farm separately as long as they could collect the same amount of output from the farmers. The managers of state enterprises and state banks would lose their privileges and would not know how to manage after privatization. Some of these bureaucrats could not be easily dismissed because they had political support from certain top government officials. The successful state enterprises were those managed by bureaucrats who were not given vested interest, could be dismissed if profits were low and were allowed to share a part of the profits. These enterprises were usually subject to competition from other enterprises in the market place. As long as the Chinese Communist Party remains in power, the bureaucrats who are party members will try to maintain and exploit their economic power if possible.

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