



A geography of institutions and reforms : interprovincial disparities and institutional reform in post-Mao China  
by Robert Karl Rothfuss II

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science in Earth Sciences  
Montana State University  
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Abstract:

The economic performance of the People's Republic of China has attracted global attention over the past 20 years. Coinciding with this performance, has been a conscious effort to reform the centrally planned economy into one that is more market friendly. It would seem that the reforms have caused the fine economic performance, but the matter is not so simple. Economic reforms have not been implemented uniformly throughout the country. Likewise, economic performance has not occurred uniformly. This research attempts to untangle some of the relationships between reforms and performance, at the provincial level, thus resulting in an economic geography of institutional reform in post- Mao China.

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of

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This thesis has been read by each member of the thesis committee and has been found to be satisfactory regarding content, English usage, format, citations, bibliographic style, and consistency, and is ready for submission to the College of Graduate Studies.

*Andrew Marcus*

Jian-yi Liu *Jian-yi Liu, Aug 7, 1997*  
Date

Approved by Department of Earth Sciences

Andrew Marcus *Andrew Marcus, Aug 7, 1997*  
Date

Approved for the College of Graduate Studies

Robert Brown *R Brown 8/15/97*  
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Signature Karl Rothman

Date 15 July 1997

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## ABSTRACT

The economic performance of the People's Republic of China has attracted global attention over the past 20 years. Coinciding with this performance, has been a conscious effort to reform the centrally planned economy into one that is more market friendly. It would seem that the reforms have caused the fine economic performance, but the matter is not so simple. Economic reforms have not been implemented uniformly throughout the country. Likewise, economic performance has not occurred uniformly. This research attempts to untangle some of the relationships between reforms and performance, at the provincial level, thus resulting in an economic geography of institutional reform in post-Mao China.

## CHAPTER 1

### INTRODUCTION

China demands the world's attention for several reasons. It boasts one-fifth of the world's population, causing concern for the strain that such a large population places on the environment. Also China is one of the few remaining communist countries and its position as a nuclear power, coupled with several land disputes, including the sovereignty of Taiwan and Tibet, makes the world's powers anxious. China's trade status as a most favored nation is a recurring theme in American politics as well.

American politicians are able to overlook accusations of human rights abuses in order to maintain friendly economic relations with the Chinese government. These economic relations are important for a number of reasons, but one overriding factor is the performance of China's economy since the late 1970s. Since that time, China's economy has grown at approximately 10 percent annually, making it among the fastest growing in the world. By way of comparison, the U.S. economy grows at about 4 percent in a good year.

Per capita incomes in China are still low and it is classified as a developing country, but this does not make the growth figures less impressive. If current growth continues, it is speculated that income figures will surpass those of the wealthy countries

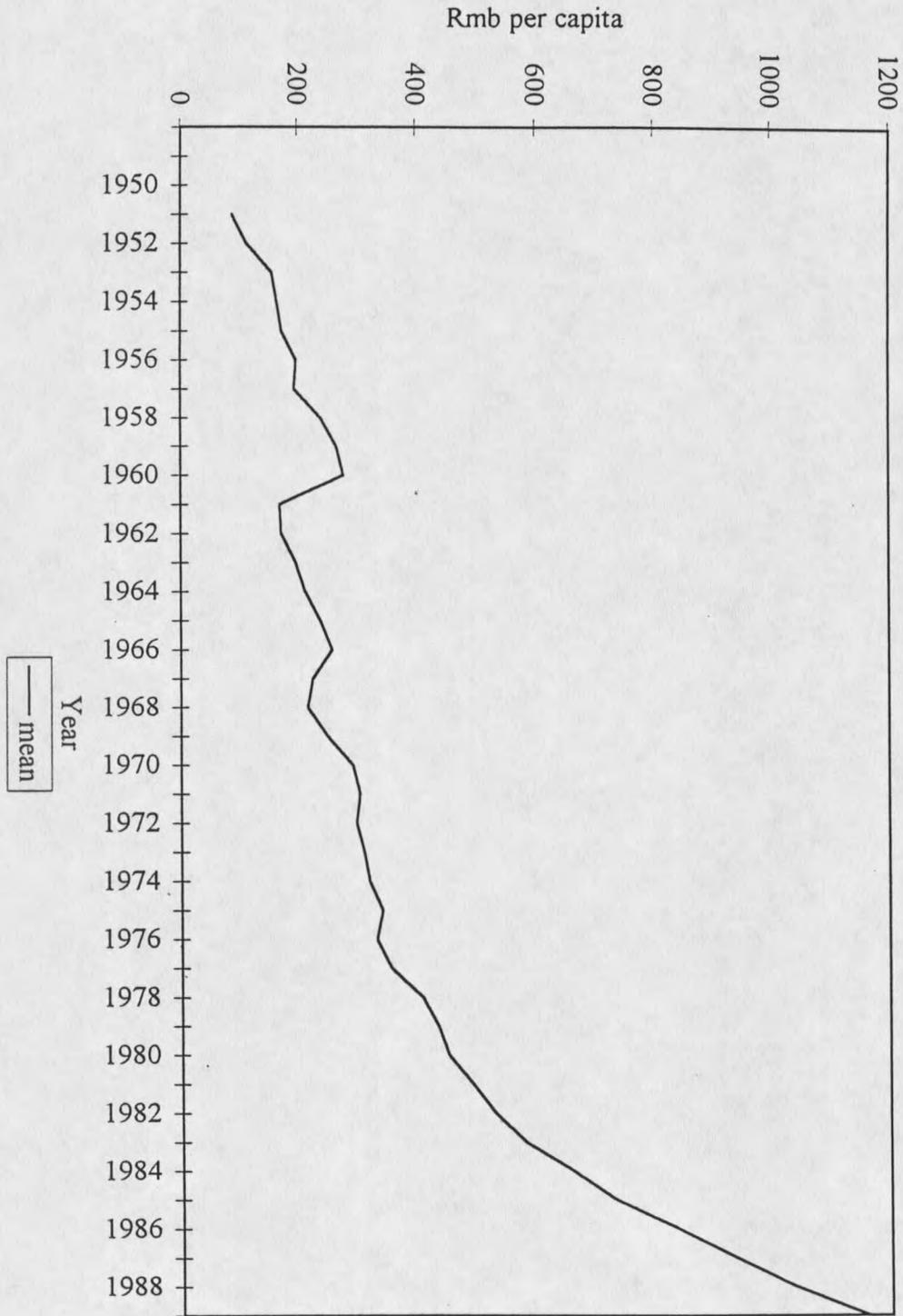


Figure 1: China's Real National Income per capita: 1949 - 1989

during the first quarter of the next century. Not only is this rapid growth and the potential for great wealth important in and of itself, but the apparent cause of the economic performance demands attention as well.

Coinciding with the late 1970s take-off of the Chinese economy is an explicit commitment on the part of China's leaders to reform their economic policy. After the death of Mao Zedong and the establishment of Deng Xiaoping's regime, China's economy set out to distance itself from the strong centralization and planning of the previous few decades. Chinese economic policies were moving toward liberalization and increased reliance on market mechanisms.

This reform process directly countered the principles of Mao's era. There were new economic institutions that encouraged foreign trade, new forms of organization, and alternative incentive structures. China looked as if it was abandoning its command economy.

Though the reform process has been characterized by market-oriented changes, China has not become a capitalist country. There has been a retreat from some socialist practices in some areas, but reform has not transformed the economy entirely. In fact, China has instituted most of its reforms on a regional basis. For example, China has opened up its economy to foreign trade practices, but only in certain restricted areas. The other parts of the country have not enjoyed such reform.

An additional fact not always stated in discussions of China's economy is that the impressive growth rates are not necessarily accurate representations of economic performance for the country as a whole. Some provinces have grown quickly while some

have not. Reform has led to large improvements in provincial growth in some places and has barely had a noticeable effect in others.

The overall relationship appears straightforward. China reformed its economy and its economy responded positively. However, further scrutiny of the facts suggests that the cause and effect relationship may not be so clear.

If reforms were not implemented uniformly and economic growth has not been uniform either, then it remains to be seen what exactly led to economic growth. This introduces the questions to be addressed by this discussion. Have reforms been uniformly implemented? And has provincial growth been equal? Finally, what is the relationship between the answers to these two questions? The purpose of this paper is to suggest answers to these questions.

The format of the following sections is as follows: Chapter 2 discusses the performance of China's economy. Chapter 3 describes the reform process that took shape in the late 1970s. Chapter 4 looks into the regional approach taken in reforming China's economy and observes the performances of China's provincial economies. Chapter 5 poses the research question and introduces the data. Chapter 6 then looks at the empirical evidence and examines the statistical tests. Finally, Chapter 7 provides some discussion and concluding thoughts.

## CHAPTER 2

## BACKGROUND: CHINA'S ECONOMIC GROWTH

The Maoist Era: 1949 - 1977

1949 marks the beginning of the Communist Party's rule and the establishment of the People's Republic of China. Ravaged by war and decades of poverty, China was set to be modernized by Mao Zedong and the Chinese People's Party. Soviet-style industrialization emphasized heavy industry, collective agriculture, and self-sufficiency as the path to a high-growth economy. In terms of growth rates in national income per capita, socialist China fared well; between 1949 and 1989 the People's Republic grew at an average annual rate of 7.65 percent.

Looking more specifically at the actual years that Mao governed Chinese policy suggests a somewhat less optimistic perspective, however. As Gregory Chow explains, "The economic development strategy of the People's Republic of China during the three decades beginning in the early 1950s is characterized by a high rate of capital accumulation at the expense of consumption and the promotion of industry at the expense of agriculture" (Chow 1993, pg. 809). The average annual growth rate of per capita income between 1949 and 1977, the Maoist period, was 5.84 percent. Still a respectable

rate, the mechanics of this growth have been shown by Chow to have been almost entirely extensive; that is, output was increased by a corresponding increase in inputs, such as land and labor. China was not developing any real growth engine - it did not grow intensively, through advances in technology or productivity. Chow's research found that three-quarters of the roughly 6 percent annual growth rate was caused by a 7.6 percent growth rate of capital (Chow 1993). He concludes, "There is no reason to assume that technological progress occurred during the period up to 1980" and adds, "Without incentives from private enterprise to innovate, [from] where could technological progress have come?" (Chow 1993, pg. 841). China's economic growth under Mao was decent, but it lacked the increasing levels of productivity provided by technological innovation. There was nothing miraculous about it; they were simply adding more inputs to create more output. There was no real economic development. The period after Mao's death; however, describes a different story, involving a much higher rate and a different source, of economic growth.

#### The Reform Era: Since 1978

The performance of China's economy since the establishment of Deng Xiaoping's leadership has been the subject of much attention. Deng's regime broke from the hard-line communist policies of the previous era and began the transition toward a more liberal, market-oriented economic system. This period represents a 5.74 percent increase in the average annual growth rate of per capita income; from 5.84 percent between 1949 and 1977 to 11.58 percent between 1978 and 1989. This shocking leap in performance, Steven

Cheung has predicted, “will be remembered as one of the most significant economic events in history” (Cheung 1989, pg. 21). China’s reform economy boasts the highest growth rates in the world.

The growth of the reform era appears to be motivated differently than that of the Maoist era. As Chow revealed, Mao’s growth rates were attributable to increasing levels of input – more labor, more land, and more natural resources. The 11.58 percent average annual growth in per capita income since 1978 is apparently fueled by increasing levels of productivity. Given fixed levels of input, more output can be achieved through superior organization and methods of production. Innovations have allowed more to be created with less. It has been found that even in China’s state-owned industries, multifactor productivity has risen after decades of stagnation (Jefferson, Rawski, and Zheng 1992). China’s new growth, therefore, has a sustainable quality as it is largely motivated by endogenous sources. This is what economists refer to as “economic miracles”.

The statistical data on China’s economic growth describes a distinct increase occurring in the late 1970s. Though some researchers suggest that China’s economy started its rapid growth in the years preceding the reforms (Borensztein and Ostry 1996), the timing of the impressive change in economic performance and the massive reforms in economic policy closely coincide. To achieve a better understanding of the relationship between the change in policy and its effect on economic performance, it is necessary to understand more specifically the types of reform enacted. The exact nature of China’s liberalization is the subject of the following section.

## CHAPTER 3

## BACKGROUND: CHINA'S REFORM PROGRAM

Political Economy of Reform

1976 marked the death of three prominent figures in communist China: Mao Zedong, Zhou Enlai, and Zhu De. After a decade of turmoil caused by the Cultural Revolution, this loss of leadership in a single year provided an opportunity for the reform-minded attitude of Deng Xiaoping to assert itself in December 1978, at the Third Plenum of the Communist People's Party (Wu and Reynolds 1988; Dernberger 1989).

To incite popular acceptance of the reforms that China needed, both the economic conditions and the political ideology had to be ripe for such change. Though official government statistics tell a somewhat optimistic story of Mao's economic leadership, many scholars tell it differently. Economist Jan Prybyla tells that at the time of Mao's death in 1976 the condition of China's economy was bad. Ten years of profound social and political turmoil during the Cultural Revolution just added to an already long-term negative trend. Factor productivity had averaged -1.5 percent annually for the 30 years prior. Periods of leftward adjustment, such as the Great Leap Forward (1958-1960) and the Cultural Revolution (1966-1976) were just "exclamation points on this downward spiral". Prybyla

explains, "the result was poverty verging on destitution in large areas of China's countryside" (Prybyla 1990, pg. 146-7).

The economic conditions leading up to the reform era require a bit more examination. As previously discussed, the government statistics regarding growth rates in aggregate output were decent, but they did not reflect the state of economic crisis that prevailed in China at the time. The Chinese economy was choking on severe bottlenecks, rising capital-output ratios, a stagnant standard of living, and large increases in real resource costs per unit of output (Dernberger 1989). Dwight Perkins observes, "Central planning led to a misallocation of both investment goods and of current inputs and outputs. Excessive control from the center, together with restrictions on the use of material incentives of any kind dampened the energies and enthusiasm of workers, managers and farmers alike" (Perkins 1988, pg. 602). Chinese economists had long recognized these problems. They too argued that China's poor economic situation "was due to excessive concentration of state power in economic decision making; complete disregard for supply and demand and the true market price of labor, material, and capital; and political management of enterprises that stifled sound economic organization and practices" (Rabushka 1987, pg. 72). The inability of central planners to allocate resources efficiently had led China's economy into a state of despair.

China faced four major economic problems in the late 1970s (Prybyla 1990). First, there were chronic shortages of wanted goods, both by consumers and producers. Second, constant misallocation of resources resulted in massive waste. Third, there was a complete stagnation of research, development, innovation, and diffusion of modern technology. And

finally, labor, management, and entrepreneurship all faced deficient incentives that led to low levels of productivity. These factors combined to create one major problem of economic performance.

Three causes can be attributed to this poor performance (Prybyla 1990). First, there were objective causes: China's large size, its huge population and population growth, decreasing farmland, decreasing energy reserves, and the huge weight of tradition. Second, there were individual policy errors and misjudgments. Finally, there was the rigid and unresponsive system itself. It was incapable of dealing with the objective problems and usually responsible for the misguided policies (Prybyla 1990).

However bad the economic conditions were, an appropriate political opportunity was needed for reform to find a supportable voice. Hewett has observed that:

It is political leaders who decide when and if the economic problems in their countries are sufficiently serious that economic reforms are required to set things right ... It is political leaders who signal that a debate on the economy can commence. It is they who determine how much of that debate can be public. It is they who determine the limits of that debate ... It is politicians who determine the general timing of a reform: the time allotted to implementation; in what order measures will be introduced; and when the pauses come ... It is the politicians who determine when the political costs of the reform outweigh the economic benefits, and therefore when it is time to retreat. (Hewett 1989, pg. 17)

After decades of flawed communist economic policy, the death of Mao provided the opening for political voices recommending reform. The economic conditions of the time had long provided an open ear among the Chinese people.

Mao died in September 1976, and soon after new political leadership asserted itself, “arresting, neutralizing and otherwise removing” key ideologues who had dictated the ultra-leftist policies of the Great Leap Forward and Cultural Revolution. Deng Xiaoping had consolidated political power by 1978 and set in motion a series of reforms that gave greater emphasis to market forces and lessened the role of the state in China's economy (Rabushka 1987, pg. 71). Many who took over control of economic policy had been mistreated during the Cultural Revolution and strongly disliked the policies that guided that decade.

Dwight Perkins explains, “China's leadership put revolutionary politics and class struggle aside and set out to make the nation wealthy and powerful” (Perkins 1988, pg. 601). The number one priority became economic development. China's new leaders were well aware that their economic performance over more than two decades paled in comparison to that of the country's East Asian neighbors. (Perkins 1988) The previously explained economic conditions coupled with this political opportunity allowed liberal reforms to be accepted.

### Introduction of Reform

The bureaucratic housecleaning and ideological reinterpretation of the late 1970s led China to actively seek an understanding of the causes of its economic problems. It was soon discovered that greater freedom was required to make local decisions and that the reward system should more closely relate to economic performance (Perkins 1988). The institutions guiding decision making and work incentives needed to be changed if efficiency and productivity were to improve. This suggested that the government bureaucracy should loosen its grip and market forces should play a more prominent role in directing the economy. In essence, the Chinese economy required liberalization, and this meant reform.

The general objectives of China's economic reform program were the following:

- (1) to decentralize production and income distribution in order to gain greater initiative and more efficiency;
- (2) to reduce the dominance of the state-planned sector, and alternatively allow a greater role for the private sector and market forces;
- (3) to reduce constraints on material rewards which spurred individual and local level activity; and
- (4) to participate in greater levels of foreign trade and emphasize opening the economy to reliance on foreign loans and direct foreign investment.

(Dernberger 1989)

These objectives were implemented through deliberate and major adjustment policies (Prybyla 1990; Wu and Reynolds 1988). Economic administration was simplified and local authorities and industrial managers took more responsibility for decision making. Even the

highly centralized budgetary system was changed to one featuring stratified management with contractual revenue sharing. The priorities of the system were reordered to more specifically benefit agriculture, industry, and foreign economic relations. The urban and rural collectives, as well as the private economy, were encouraged to grow rapidly. Emphasis was placed on the importation of modern engineering technology to "help modernize the technologically retarded Chinese plants and equipment" (Prybyla 1990, pg. 148). Two specific measures aimed at agriculture were a sharp rise in the state purchase price for farm products and reduction of the state purchase quota as well as the replacement of the People's Commune with the household-based contract responsibility system (Wu and Reynolds 1988). It was the intention China's reform leadership to use selected capitalist techniques to supplement the command economy. They aimed at using capitalism in order to build socialism (Prybyla 1990).

The following three sub-sections look more closely at the three main arenas for China's reform: agriculture, industry, and foreign trade and investment. It is in these areas where the intention to reform begins to take shape.

### Agricultural Reform

1955 and 1956 mark the collectivization of agriculture in China. Producer's cooperatives of about 200 families were organized and individual farmers were rewarded by earning points based on the amount of time, effort, and skill they put into their work and the political attitude they displayed. The Great Leap Forward (1958-1960) coincides with the transformation of producer's cooperatives into Rural People's Communes. In

1962 they reverted back to producer's cooperatives and remained approximately the same until the late 1970s.

In 1978, a typical Chinese rural collective was composed of three levels: the commune, the production brigade, and the production team. In that same year, Chinese agriculture comprised 294 million people in 72,780 communes with an average of 13 production brigades of 7-10 production teams (Johnson 1988). The production team represented the basic accounting and production-organizing unit in the agricultural sector. On a yearly basis each team was given a production target for which it drew up a production plan. The production plan described how to use the land, labor, animals, and farm tools; when to plow; and what types of fertilizer to use for which types of crops (McMillan, Whalley, and Zhu 1989). The quantity of work done was measured in terms of labor days, under the "labor day/work payment" system. Those who showed up in the field received a labor day and work points received per labor day measured the quality of work done. Work points were attached to the different grades that classified team members according to their technical skills, their capacity for work, and their success in meeting the labor norms set up by the team. Members periodically assessed each other's work and determined each others' grades and thus work points. At the end of the agricultural year, the combined income of the team was divided by the sum of work points credited to all team members to determine the value of one work point. The income of each member was determined by multiplying by the number of work points the individual had accumulated over the agricultural year. (McMillan, Whalley, and Zhu 1989, pg. 784) In addition, 5

percent of the arable land was set aside for personal use. Nevertheless, the ability to sell this produce was severely restricted.

As the most broadly defined unit, the commune was both a political and an economic form of organization. It was responsible for most of the local government functions, such as police, justice, welfare, education, and health care (including family planning). In addition, the commune had exclusive power over the economic functions of its brigades and production teams. In essence, "the commune, including all its units, determined who got how much pay in kind and in money and who got assigned to specific jobs" (Johnson 1988, pg. S229). This system had remained fairly intact since the early 1960s.

Prior to reform, China's agricultural growth was sluggish (Lin 1992) and the reform leadership began to view their rural collective economy as an obstacle to economic progress (Putterman 1992). At the Third Plenum of December 1978, it was decided that reform should aim at raising farmers' material rewards and relating them to performance (Perkins 1988, pg. 607). This was the beginning of agricultural reform in China.

In 1978, it was acknowledged that the key to improving farmers' incentives was solving the managerial problems in the team system. The government at the time considered the subdivision of collectively owned land into individual household tracts as contrary to socialist principles. It explicitly prohibited this practice. Nevertheless, around the end of 1978, a few production teams, first covertly and later openly, began to use the system of contracting land, resources, and output quotas to individual households. After a year, these teams brought in far greater yields than other teams. (Lin 1992, pg. 37) There were two primary features of the agricultural reform. First, the state raised its procurement

prices and lowered compulsory state quotas. Second, the so-called Household Responsibility System was instituted whereby land was contracted to individual households with the objective of tying the reward received more closely to the work performed.

The increase in state procurement prices for major crops was, on average, about 22.1 percent in 1979 (Lin 1992). The system had traditionally involved two prices: quota prices and above-quota prices. Reform meant increases in both of these and led to a large rise in the state's financial responsibility to the agricultural sector. Lin points out, "The government's original intention was to improve agricultural production through raising the long-depressed state procurement prices for major crops, modifying management methods within the collective system, and increasing budgetary expenditure on agricultural investments" (Lin 1992, pg. 36). In addition, the state reduced taxes on grain, livestock, and collectively run enterprises (Rabushka 1987). These programs fiscally overextended the government. To reduce the state's burden, mandatory quotas were soon abolished and replaced by procurement contracts negotiated between the government and farmers (Lin 1992). China's agriculture, once the centerpiece of socialist central planning, was beginning to resemble that of a decentralized market economy.

The Household Responsibility System changed the basic unit of agricultural decision making from the production team to the individual household. Land was now contracted out to the households for periods of 15 years and procurement contracts were negotiated by the household. The new system, which ironically had been expressly prohibited only a year earlier, involved contracts between the production team and each household, used to

regulate taxes and delivery quotas payable to the state and the welfare funds and investment funds payable to the team. Production above the delivery quota was retained by the household, who could sell it and keep any proceeds. Most restrictions on production activities on private plots were removed (McMillan, Whalley, and Zhu 1989, pg. 785) and regions were now allowed to specialize in planting crops more suitable to their environmental characteristics. Also, rural trade fairs were freed up in 1979, although there is no reliable measure of the extent of this. Dwight Perkins points out that the results were readily apparent to any traveler who visited the Chinese countryside in both the early 1970s and 1979 (Perkins 1988, pg. 608). By 1984, 97 percent of farm families were under the Household Responsibility System.

With agriculture working toward decollectivization, individual farmers and households, after meeting state contracted output requirements, were free to dispose of surplus as they saw fit. Private plots doubled to constitute 15 percent of China's total cultivated area and farmers were soon allowed to hire other farmers as laborers (Rabushka 1987). Though many of the ingredients for a market system were already in place (Perkins 1988), this institutional reform of 1979 led to remarkable achievements in China's agricultural sector (Lin 1989). Whereas, in the period before reform, the main contributions to agricultural output growth were grain, after the freeing up of rural markets in 1979, all components of farm output grew more rapidly including grain despite the de-emphasis on "taking grain as the key link". Cash (nongrain) crops and animal husbandry, however, displayed the largest increases in output growth. (Perkins 1988, pg. 612).

Between 1979 and 1984, agricultural output increased by 61 percent. Of this rise in output, 78 percent was found to be directly linked to the incentive effects of the Household Responsibility System while the remaining 22 percent came from the increase in agricultural price levels (McMillan, Whalley, and Zhu 1989). In addition, new incentives led to a 32 percent increase in total factor productivity (McMillan, Whalley, and Zhu 1989). This structural change is also expected to lead to sustained long-run increases in agricultural output by improving the incentive for adopting new technologies (Lin 1989). It has become clear that the institutional reform characterized by the change from the production team to the Household Responsibility System met with great success between 1979 and 1984.

Economist Gale Johnson, however, offers the insight that as economic growth occurs, farming provides a declining share of total employment opportunities in the economy. In most countries, "farm people find alternatives to the decline in farm job opportunities by either migrating to cities or towns or engaging in nonfarm work while retaining their farm residence. In China migrating to cities, especially to large cities, is severely restricted, one might say almost prohibited" (Johnson 1988, pg. S237). This evidence suggests that reform isolated to one industry or one facet of the economy will eventually become restricted by those areas not yet reformed.

Nevertheless, for the most part, agricultural reform has been seen as successful. It was these good results in agriculture that provided momentum for similar reform sentiments to be raised regarding the industrial sector (Perkins 1988). Industrial reform would prove a more difficult task though, as will be discussed in the next section.

## Industrial Reform

Much as had been the case in the agricultural sector, industry under Mao's regime was transformed into a wholly state-controlled affair with central planners determining who would work where and for how much, what each factory would produce, and at what price all goods would be sold. Material incentives in the state sector were strictly forbidden and the market played virtually no role in the allocation of consumer goods. (Byrd 1993, pg. 329). Chinese industry was greatly affected by the industrial strategy of the Soviet Union.

This industrial program met with several chronically debilitating problems; again much like that of the Soviet Union. William Byrd lists the troubles facing Chinese state-owned industry: "Inefficiency in converting material inputs and energy into outputs; poor product quality; mismatches between supply and demand; excessive inventories; inefficient investment; widespread underutilization of fixed assets; and [an] overly dispersed ... inefficient regional pattern of industrialization" (Byrd 1993, pg. 329). In addition, David Dollar suggests three main sources for these constant industrial inefficiencies (Dollar 1990). First, planners generally do not have the information necessary to make the optimal allocation of resources across enterprises. These decisions require precise knowledge of the facts specific to different industrial units. Second, administrators have weak abilities to monitor enterprises in order to ensure that they are using resources efficiently. Again, this requires knowledge specific to local situations. Finally, the main incentive that administrators could use to reward good performance was to create additional

employment. This generated a bias toward excessive labor input and low labor productivity.

In Chinese industry from the early 1950s to the late 1970s, the allocation of labor, capital, and materials to industrial enterprises was done bureaucratically, at the central or regional level, and output was usually sold to the state at fixed prices. Though this system succeeded in channeling capital and labor into industry and raising industrial output, there is considerable evidence of poor allocative efficiency in this planned sector. "Total factor productivity was at best stagnant in Chinese industry from 1957 to 1978 and may have actually declined over that period" (Dollar 1990, pg. 89). This being the pre-reform situation, Mao's death provided a timely opportunity for industrial reform.

Industrial reforms differed somewhat from the more structurally-oriented agricultural reforms in that they came more by way of adjustments to the level of centralization of the command system. Structural reforms did not take on a significant role until later in the 1980s, after the success of agricultural reforms was evident. In fact, industrial reforms were initially launched as small scale experiments like the early agricultural reforms (Rabushka 1987).

In October of 1978, six enterprises in Sichuan were the subjects of an experiment intended to "analyze the economic effects of letting managers plan production according to market demand, marketing production directly, retaining profits, investing profits in new capacity, and controlling personnel affairs" (Rabushka 1987, pg. 79). In early 1979 the experiment was expanded to 100 firms and then to 4000 more firms throughout the

country later that same year. By June 1980, the reform experiment included 6,600 enterprises; by 1981, the number was 30,000 (Rabushka 1987).

Alvin Rabushka better details the features of these reform experiments:

1. After meeting a government-specified output target, the enterprises could produce and market additional merchandise in response to market demand.
2. An enterprise could market its above-target output and any new products it developed.
3. An enterprise could retain 3 to 5 percent of the profits it made according to the state plan, as well as an additional 15 to 20 percent of its profits from above-plan sales.
4. An enterprise could retain 60 percent of depreciation funds for technical renovation and innovation.
5. An enterprise could pay its workers and staff a production bonus of 17 percent of standard total wages.
6. Enterprises could appoint middle management without interference from higher state bodies.
7. Interest on working capital was set at zero for quota sales and at low rates for above-quota production, but at high rates to finance excess inventory. (Rabushka 1987, pg. 80)

The theme of these reform experiments was the devolution of economic control to the enterprise level. The success of the experiments led to more widespread industrial reform.

Around 1980, industrial firms were given increased rights to profit retention, a bonus system was instituted to increase work incentives, enterprises were given more choice regarding input and output decisions, and foreign trade and investment (to be discussed in more detail later) was given greater priority (Rawski 1994). By the mid-1980s, industrial plan targets were increasingly being replaced by "responsibility contracts" that allowed firms to retain any surplus after fulfilling specific production and financial obligations. This surplus could then be exchanged in markets at largely uncontrolled prices (Rawski 1994).

The goal of industrial reform was to change the industrial setting so that managers and workers could make decisions about inputs and outputs and have a direct material stake in those decisions (Dollar 1990, pg. 92). This goal was to be achieved by implementing reform with some common basic components aimed at improving efficiency. Reforms allowed greater discretionary power at the enterprise level regarding production and investment activities; made use of material incentives to supplement administrative directives; and expanded the role of the market mechanism in resource allocation (Byrd 1983). Primarily, industrial reforms consisted of "enabling measures" meant to remove barriers to enterprise initiative (Rawski 1994).

Using a World Bank survey of 20 state-owned enterprises, Dollar found total factor productivity to have increased significantly during the period of China's industrial reform (Dollar 1990). Big gains in output, employment and exports have also been recorded (Rawski 1994). Though many policy innovations considered essential to market transition, such as privatization and bankruptcy laws, are absent in the Chinese industrial reform; even this partial deregulation has "sufficed to unleash vigorous competition"

(Rawski 1994, pg. 273) in the form of rural industry, entrepreneurship, and defense conversion. Coupled with mounting financial pressures, this competition has greatly improved the performance of China's industrial sector.

Professor Rawski offers a summary account of the situation confronting China's reform industries:

In essence, institutional changes arising from partial reform created a virtuous circle in which the growing intensity of competition not only rewarded winners and punished losers, but by crippling the growth of fiscal revenues, diminished the ability of the state to protect losers from the consequences of high costs, poor quality, inattention to customer requirements, and other long-standing habits carried over from the planned economy. State enterprises, stung by competition and only partially compensated for falling profits or financial losses, pressed for further relaxation of the state's regulatory web and sought relief from costly social obligations which their collective rivals had largely avoided. These pleas brought fresh increments of deregulation, stronger competition, additional erosion of profits, slower growth of government revenue, and so on.

(Rawski 1994, pg. 273)

As was the case with the agricultural reforms, industrial reforms do not exist isolated from other influences. In addition to reforms in its domestic spheres of policy, China's reform agenda consisted of measures aimed at commercial relations with the world economy.

China's open-door policy is the subject of the next section.

### Open-Door Policy

The reform era prompted a new attitude toward relations with the outside world; a sphere historically problematic for China. In its quest for modernization, revision of the foreign trade and foreign investment structure were seen as integral and critical components. Introduced in the broader strategy of reconstruction and reform, China's open-door policy was given the purpose of "absorbing advanced technology and know-how through the promotion of foreign trade and investment" (Leung 1991, pg. 96). This strategy represented a significant policy shift from the isolationist days of the Communist era and the many centuries prior to it.

In July of 1979, two provinces, Guangdong and Fujian, were authorized to "take extraordinary measures to develop tourism, foreign trade, and investment" (Stoltenberg 1984, pg. 308). As part of this policy, in December 1980 four cities were formally designated as Special Economic Zones (SEZs), an idea borrowed from the successful "export-processing zones" in other developing countries (Rabushka 1987, pg. 85). These special processing or manufacturing zones, like the Chinese SEZs, were, in essence, a "geographically defined area within which lower taxes prevail, fewer commercial restrictions are in effect, and less government intervention in the economy is evident" (Wang and Bradbury 1986, pg. 308). The SEZ cities were Shenzhen, Zhuhai and Shantou in Guangdong, and Xiamen in Fujian.

Locationally and in terms of their function, the new SEZs were reminiscent of the Treaty Ports of the 19th century. However, unlike the Treaty Ports, the SEZs do not represent China caving in to external pressures; they represent China caving in to the

internal pressure for economic growth. The locations of the SEZs are meant to be accessible to overseas Chinese entrepreneurs, especially in Hong Kong, Macao, and Taiwan. In addition, Fujian and Guangdong are the home provinces of many overseas Chinese (Wang and Bradbury 1986).

The establishment of the SEZs, though contrary to communist principles, met with significant Party approval. Gu Mu, CCP Secretariat member, is quoted as saying:

The faster a country's economic development, the bigger strides it will take in using foreign capital, importing technology, and developing trade. It will become a trend of economic development in the present world for a country to open itself to the outside world and develop economic exchange with foreign countries to promote and accelerate its own economic construction. (Fewsmith 1986, pg. 79)

Similarly, Premier Zhao Ziyang, stated:

The special economic zones ... are bridgeheads in our opening to the outside world, and they should play the role of springboard. On the one hand, they should import advanced foreign technology, equipment, and management and operations methods; absorb and digest them; apply them in innovations; and transfer them to the interior. On the other hand, they should sell commodities produced in the coastal areas with foreign technology to the interior, and export the latter's raw materials and produce, with added value after processing here, to the international

market, in order to achieve better economic results. (Fewsmith 1986, pg. 79).

In 1984, 14 Open Coastal Cities (OCCs) were established in the likeness of the SEZs. Surrounding these cities, Open Coastal Areas were maintained to disperse the benefits of greater economic freedom beyond the city boundaries. In addition, Hainan Island was designated as the fifth SEZ during that same year.

The specific functions of SEZs and OCCs are described as follows:

1. to serve as bridges for introducing foreign capital, advanced technology, and equipment, and as classrooms for training personnel capable of mastering advanced technology;
2. to promote competition between regions, between trades, and within a certain trade, all to the larger end of developing the national economy and expediting China's enterprise production and management;
3. to absorb foreign exchange and to filter part of the foreign capital, technology, and equipment through the SEZs to other regions;
4. to serve as experimental units in economic structural reform and as schools for learning the law of value and the regulation of production according to market demands; and,
5. to employ many young people waiting for jobs. (Stoltenberg 1984, pg. 639)

China was moving further away from the policies of Mao and toward the capitalist West.

A key ingredient of the SEZ and the OCC is the promotion of joint-ventures whereby Chinese partners provide land, labor, and infrastructure, while foreign partners provide capital and key equipment. These types of enterprises are encouraged through favorable policies such as, import tax exemption for equipment and construction materials; export tax exemption for finished and semi-finished products; two-way remittance of foreign currencies; and preferential tax rates (Wang and Bradbury 1986). Rabushka writes:

Within the zones, foreign-owned enterprises and joint-ventures managed by foreigners and overseas Chinese and their boards of directors produced goods for export. Local Chinese government intervention was minimized. Foreigners were subject to income taxes and property rents, but, by and large, the zones were intended to simulate Hong Kong's free-market system. The zones constituted enclaves of capitalism within China, with an outward orientation. (Rabushka 1987, pg. 86)

Through preferential policies in the spheres of investment, foreign exchange, revenue remittance, pricing, and financing, China's SEZs and OCCs mimicked capitalist institutions in an attempt to save their socialist economy.

The preceding discussion has been an attempt to highlight the reform process of post-Mao China. The important points to be gained from this are that China was ripe for reform after almost three decades of economic stagnation, and that reform aimed at liberalizing the economy. These reforms manifested themselves in the three main arenas discussed: agriculture, industry, and foreign economic-relations. Their goals were similar across these

sectors though; they aimed at decentralizing, increasing incentives, and opening the economy.

## CHAPTER 4

## THE REGIONAL NATURE OF REFORM AND INTERPROVINCIAL DISPARITIES

The Regional Nature of Reform

As suggested in the previous chapter, the changes brought about by China's reform process have been massive. However limited, this acceptance of liberal economic policy would have been considered criminal prior to the late 1970s. Nevertheless, China's transformation toward a market economy is by no means complete, nor is there substantial evidence suggesting that it ever will be. The rhetoric of the leaders of the People's Republic shows no sign of backing away from their commitment to the principles of Chinese socialism.

The disjuncture between their words and their actions with regard to liberal economic policy is masked by slogans such as "socialism with Chinese characteristics" and "using capitalism to build socialism". Some researchers have assumed that the goal of China's reform process is to become a market economy. Under this assumption, it is natural to deem the reform as partial or incomplete, as it has not achieved its assumed aim. There is no reason to believe, however, that complete reform in this sense is the end for which China's leaders wish.

The goal to which Chinese economic reforms aspire is wealth. The pragmatic Deng Xiaoping has made it clear that his intention was to develop the Chinese economy and that reforms would be implemented with that aim in mind. Given this clear end, all that remains to be determined are the means appropriate to achieving it. China has pursued a unique strategy toward determining which reforms serve best the efficient attainment of their goal. They have not implemented economic reforms uniformly throughout the country, but have introduced them regionally; as if experimentally to determine how different reforms perform in different test markets.

Instead of committing to one set of reforms throughout the economy, policy change in China has been pursued on a regional basis. Borensztein and Ostry explain that China has pursued a "strategy of selective localized liberalization" such that "the current Chinese economic geography includes regions dominated by dynamic market oriented activities (such as the south coastal region) as well as regions dominated by traditional, Soviet-style, industrial state-owned enterprises (as in the northeast)" (Borensztein and Ostry 1996, pg. 226). This regional approach to reform is an important and distinctive feature of China's economic policy.

There are several explanations for this reform strategy. One asserts that China has used different reforms in different regions as a method of experimentation. Fligstein claims that it is clear that China's leaders have been experimenting with their institutions (Fligstein 1996, pg. 1080). This seems a logical manner to pursue an end whose most appropriate means are not known; reforms that are successful will be repeated while those that fail will be discarded. This approach is, however, unconventional in economic development policy.

Alternatively, geographer Cindy Fan suggests that China's leaders are pursuing a growth-pole or ladder-step strategy toward economic development whereby certain areas develop and eventually bring the rest of the country up to their level. It is evident that Chinese economic reforms explicitly divided the country into three economic belts (Fan 1995; Naughton 1988). The eastern section was deemed most appropriate for export-oriented industry and foreign trade. The central region was dedicated to agriculture and energy, while the west was to perform its duties in animal husbandry and mineral exploitation. The overall plan was that foreign trade and industrial production in the eastern region would initiate economic growth, which would diffuse to the central and western regions. Economic reform was intended to allow some people and some regions to get rich first in order to pull the rest up behind them.

Another explanation is that not all of the regional and industry-specific reform that has occurred has been planned. Economist Louis Putterman suggests that some areas of the economy were more easily reformed than others. As he explains:

The economic reforms that began in 1978 contained an implicit attack on the dualistic character of the Chinese economy. Changes and proposals for change in the rural collective and the state industrial sectors pointed toward making both sectors operate under the regulation of markets; and if factors of production were allocated to both sectors according to market signals, dualism would come to an end. In practice, however, the institutions governing both state industry and the staple crop core of agriculture were resistant to change, and it proved easier to open the economy to the

growth of competitive forces on the fringes of these sectors than to put either of them on a fully commercial basis. Reform put an end to dualism in China, but it did so by creating yet another institutionally distinct sector rather than creating a unified market economy. (Putterman 1992, pg. 470)

According to this explanation, economic reform has not been applied uniformly throughout China because parts of the economy are entrenched enough to resist pressures to change.

Though there may be several explanations, it appears evident that China has implemented its reforms unequally throughout its provinces. Industrial and agricultural reforms were first tested on small scale, trial-bases and open-door reforms have been introduced through regionally defined Special Economic Zones and Open Coastal Cities. It follows that if reform has not been implemented uniformly, its effects on economic performance are not likely to be observed uniformly either. Along these lines, Fan claims that "preferential policies constitute the institutional mechanisms that have resulted in concentrated and selective growth in certain ... locations" (Fan 1995, pg. 426). Inter-provincial economic disparities in China are the subject of the following discussion.

### Interprovincial Disparities

It has been shown that the Chinese economy has, overall, performed very well since the late 1970s. It remains to be seen, however, whether this economic success has been spread uniformly throughout the country, or if the some provinces have grown rapidly

while others stagnated. This is an important issue for any study of China's economic performance and during both the Maoist era and since the beginning of market-oriented reforms, provincial equity has figured prominently in China's development experience (Lyons 1991).

During the Maoist era, inter-provincial equity was a stated aim of economic policy. As Thomas Lyons explains:

One of the most widely remarked elements of the Chinese model is the high priority assigned regional objectives and, more specifically, to "balance" in the distribution of income and, hence, consumption. During the Maoist era, the central government pursued regional objectives through such measures as interregional transfers of investment resources (effected via the planning system), subsidization of health and education expenditures in poor regions, and attempts to maintain a safety net of state relief (effected largely via control of grain surpluses). In short, there is little doubt that prior to 1979 the Chinese leadership placed an unusually high value on the spread of modern growth and the improvements in welfare associated with it and persistently acted to limit the emergence or widening of interregional disparities. (Lyons 1991, pg. 471)

Dispersion of regional output and income appears to have been relatively narrow during the pre-reform era. Exceptions do appear during the years of Maoist radicalism such as the Great Leap Forward (1958-60) and the Cultural Revolution (1966-76) (Lyons 1991). The years since reform do not provide a clear picture on interregional disparities however.

Scholars seem unsure as to the state of economic dispersion between China's provinces since the late 1970s. Some find disparities widening rapidly, while others hold out the hope that economic reforms will undo the inequality brought about by the misguided policies of the Cultural Revolution (Lyons 1991, pg. 472). Among researchers, there is direct contradiction of the evidence.

Sociologist Victor Nee suggests that regional disparities have been on the increase due to regional variation in the extent of institutional reform. He explains:

The maritime provinces -- targeted by Beijing as the experimental grounds for market reforms -- have experienced a more rapid shift to markets, which sparked more rapid economic growth there. Though the maritime provinces were more developed economically prior to economic reform, the gap between coastal and inland provinces increased throughout the 1980s. (Nee 1996, pg. 917)

The position here is that disparities have increased as the coastal regions outpace interior provinces. Cindy Fan, on the other hand, directly opposes this evaluation of the facts.

Fan suggests that, though it seemed that economic disparities between provinces were on the increase, they have actually been reduced. She claims that because the high growth coastal regions were relatively underdeveloped prior to reforms, their performance has had the effect of evening out disparities. Her argument is that diverging growth rates have resulted in converging income levels (Fan 1995). This conclusion seems paradoxical to Fan since the policy designed to favor China's most developed region has reduced

inequality among all provinces. It is equally paradoxical that, given the same set of facts, these two scholars would arrive at opposing conclusions.

A third possibility is posed by sociologists Szelenyi and Kostello. They suggest that disparities have both increased and decreased. They summarize their argument as follows:

There is substantial evidence that the overall degree of income inequality did indeed decline slightly following the introduction of market reform.

However, there is also evidence that it began to increase not long after.

Data from Eastern Europe and China show a similar pattern: well before a full-fledged market economy is in place, inequality will be higher than it was during the classical model of state socialist redistributive economy ...

In China, the first five years or so of post-1978 reforms produced a slight decrease of inequalities, but since the mid-1980s Chinese society has become increasingly inegalitarian. (Szelenyi and Kostello 1996, pg. 1084)

Economist Martin Raiser agrees with the emphasis of this position, claiming that income levels converged at the beginning of reform but slowed in the second half of the 1980s.

Given the disagreement among scholars it will be important to look at the statistical evidence and determine which argument deserves the most weight. This leads to the specification of this paper's research questions - the topic of the next chapter.

## CHAPTER 5

## RESEARCH QUESTIONS AND DATA

The Research Questions

The purpose of the discussion up to this point has been to establish two facts regarding China's economy, and then to propose the possibility of two others. The established facts, covered in Chapters 2 and 3, are as follows:

- (1) China's economy has grown rapidly since 1978; and
- (2) 1978 marks the beginning of China's reform era in which concerted effort has been made to liberalize economic policy toward agriculture, industry, and foreign-economic relations.

The potential facts were introduced in Chapter 4. They are:

- (3) Reforms may not have been implemented uniformly throughout the country, as changes have been enacted on a regional basis; and
- (4) China's economic growth has possibly not been uniform throughout the country either; interprovincial disparities may have been on the rise.

The relationship appears straightforward if only the first two facts are observed. China's economy started growing rapidly at the same time that reforms were implemented.







































































































































































































