Uneven economic development

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Introduction	80
A historical overview of regional economic development	82
The economic causes of uneven regional development	92
The political causes of uneven regional development	97
Conclusion	108
References	110
Further reading	111

Introduction

Uneven development is a universal phenomenon. It exists in almost all large countries, developing and developed alike. Examples include India, Indonesia, Mexico, Brazil, Canada, Great Britain, France, Italy and the United States. China is no exception.

The regional inequality that results from uneven development is of interest for a variety of reasons. First, the problem of regional disparity is a problem of economic growth. If all regions had grown at the same pace, there would be no income differences between regions in the first place. Even if regional gaps exist, as long as poor regions are able to grow faster than rich ones, the former would converge with the latter and the initial differences would thereby disappear in due course. Some economic theories predict convergence, but the empirical evidence has been a subject of debate. In any event, it is an undeniable fact that regional disparities persist in most countries. To find the root causes of regional disparities, we have to trace the long-term growth paths of different regions in the national economy and to understand the dynamics of regional growth.

Second, regional disparity is an ethical issue. Unless the process of economic development is intrinsically even, society is always confronted with the fundamental contradiction between ethically motivated efforts to establish socioeconomic parity in space and the economically more advantageous strategy of letting inequality increase, as long as it makes the whole economy grow faster. No one denies the importance of attaining a high overall growth rate, but the question to investigate here is: who benefits from the rapid economic growth? Both economic growth and fairness in the distribution of income are desirable. Unfortunately, the two goals are often in conflict with each other. The maximisation of growth could worsen the problem of inequality, whereas the pursuit of equality may slow down national growth. A development strategy should not concern itself simply with the maximisation of one objective at the expense of the other: it has to consider the trade-off between them. However, it is impossible to find out where the optimal point lies, for the problem involves ethical judgements. The study of regional disparity makes it explicit that any development strategy is founded on the basis of a certain ethical principle.

Third, regional disparity is an issue of political significance, because regional economic disparities may have adverse effects on the political stability and unity of the nation. The relation between inequality and political instability is a close one. In countless instances, real and perceived inequities give rise to political conflicts. Inter-regional inequality could be a source of political conflict, just as inequalities between social groups are. Regions are not just geographic and economic entities but also social and political ones. Residents of one region tend to care more about the welfare of other residents than about the welfare of inhabitants of other regions. As a result, there tends to be a widespread sense of grievance among the people living in regions where average incomes are noticeably lower than in other regions of the country, or the incomes are growing noticeably slower. They may regard an insufficiently sympathetic central government as partly responsible for their plight.

Meanwhile, those living in more developed regions are likely to perceive that their economies are the backbone of the nation. If the central government intervenes to correct regional disparities in such a way that the high-income regions have to subsidise the poor ones, then these regions are likely to believe that such fiscal transfers to low-growth regions are just a waste of money because, in their view, trying to sustain inefficient economic activity is irrational. Thus, any attempt to redistribute resources across regions is likely to provoke resistance from rich regions.

In other words, persistent regional disparities may not only frustrate people living in relatively impoverished regions but also alienate those living in affluent regions. History suggests that when regional disparities become excessive, catastrophic political consequences could occur. Especially when ethnic, religious, and linguistic differences are combined with economic disparities, the result could be an explosive situation. Examples include secessionist movements in the Punjab of India; Bougainville of Papua New Guinea; Quebec in Canada; the Lombardy region of Italy; Katanga in Zaire; Biafra in Nigeria; and Scotland, Wales and Northern Ireland in Great Britain. One factor contributing to the disintegration of both the former Yugoslavia and the former Soviet Union was growing income gaps among their ethnically populated republics. In 1993, Mahbub Ul Haq, the principal author of the UNDP's Human Development Report, warned that the widening of regional disparities was threatening the unity and stability of seventeen countries. In particular, his team predicted that Rwanda was in danger of disintegration, and Chiapas in Mexico might soon become a trouble spot. Barely before their report came out, troubles occurred in both places. Ul Haq later pointed out:

Regional disparity is an especially powerful index because poverty itself cannot interpret the disintegration of a county. But if the poor people are concentrated in one region, they can easily be organized, just as in the peasant uprising in the Chiapas region of Mexico. When we were studying Mexico, the data of the Chiapas region was already catching our attention. Although the Mexican government was not happy, we still predicted that the region might become a trouble spot. And it has proved that we are right.

Covering 9.6 million square kilometres, China is the third largest country in the world. Given its gigantic size, it is perhaps inevitable to find significant spatial variations in geographical condition, resource endowment, the sectoral distribution of economic activity, and the level of socioeconomic development. Indeed, the UNDP's *Human Development Report* (1994) listed China as one of the countries in which regional gaps had become excessively large. The UNDP's advice to China in 1994 was that 'it will need to take care that existing regional disparities do not widen further. Thoughtful state intervention will be required to ensure a more equitable distribution of social services.' Given the UNDP's good record in predicating national disintegration elsewhere, its advice should not be taken lightly.

In fact, since the mid-1990s, geographers, economists, sociologists, and political scientists both inside and outside the country have been fiercely debating three issues concerning regional inequality in China:

- What are the key factors that have contributed to changes in regional disparities?
- 2 Have China's reforms ameliorated or aggravated existing regional inequalities?
- 3 Should the Chinese government do anything to narrow regional disparities?

The purpose of this chapter is to explore various key issues in the current debate over the spatial effects of reforms. I begin the analysis by looking at the historical roots of uneven development and initial attempts to address regional imbalance. I then look at how and why regional disparities have widened since 1978. In addition to examining the broad patterns of regional disparities, the chapter investigates both the economic and political factors that have caused these patterns. Until comparatively recently, economics, politics and ethics were seen as parts of an indivisible whole. However, as modern economics evolves, the importance of ethical and political perspectives has substantially weakened. This chapter argues that regional disparity can only be fully understood by applying the perspectives and insights of economics, politics and ethics. That is why, rather than dealing with regional disparity solely from an economic perspective, I take a political economy approach. As well as describing the economic basis of regional disparities, I investigate the political and social factors that have shaped these developments. After doing so, I end the chapter with a brief discussion of institutional prerequisites that are necessary if the government is to ease tensions caused by real and perceived regional gaps.

A historical overview of regional economic development

When the Chinese Communists came to power in 1949, they inherited an extremely lopsided economy. Industrial activities were to a large extent concentrated in what was then called Manchuria (the modern-day northeast provinces of Heilongjiang, Jilin, and Liaoning) and a few major coastal cities such as Shanghai, Xiamen and Guangzhou. Although the coastal provinces accounted for only 11.34 per cent of the land, they were the source of 77.6 per cent of total industrial output. The rest of the country produced only 22.4 per cent of the total industrial output. In particular, western China lagged far behind. Only 8 per cent of the total industrial output originated in this region, despite the fact it took up over half of the country's territory (Sheng and Feng 1991: 666).

Regional development during the Mao years

The new Communist government made a strong commitment to achieving balanced distribution of productive capacity and income. The First Five-Year Plan (1953–7) of the People's Republic gave high priority to the development of new industrial bases in north, northwest and central China. Among the 694 industrial projects built during this period, most were located in the inland areas (Bo 1991:

475). But Mao hoped to see more changes. In his famous 1956 speech, 'On Ten Major Relationships', he again dwelt on the relations between the coast and the interior. In his view, it was both economically irrational and politically unacceptable to keep 70 per cent of industry in the coastal areas while leaving the rest of the country more or less untouched by modernisation. To speed up the industrialisation of the interior, he suggested that new industrial facilities be located in the interior. Only by doing so, he believed, would industrial activities become more evenly distributed.

Indeed, Mao's era was marked by an unprecedented spatial redeployment of productive capacity. Thanks to its strong extractive capacity, the central government under Mao had firm control over the geographic distribution of resources. The investment policy of this period clearly favoured backward regions. While more developed provinces experienced substantial outflows of revenues, less developed provinces received enormous infusions of funds for infrastructure and industrial development.

Moreover, in the mid-1960s, out of security considerations, China began a campaign to construct the Third Front, which covered all western provinces and some parts of the central provinces. From late 1964 to 1971, dozens of large- and medium-sized industrial enterprises were moved from coastal provinces to inland provinces, and hundreds more were built on site. Altogether, between 1956 and 1978, more than 2,000 large- and medium-sized enterprises were established in west and central China. This shift in investment and the establishment of new industrial centres powerfully boosted industrial growth in the traditionally less developed regions. In 1965, for example, the ratio of agriculture to light industry to heavy industry for central China was 71:15:14. By the end of the Fourth Five-Year Plan period (1971–75), it had become 44:22:34. For the same period, the ratio for west China changed from 69:16:15 to 40:23:37. In addition to financing investments in less developed regions, fiscal transfers were used to reduce regional inequality in income and the provision of public goods and services (Sheng and Feng 1991: 667). Government transfers made it possible for consumption to be much more evenly distributed than output. As a result, Mao's era witnessed a strong trend toward greater equality in per capita consumption across the country.

In 1978, China changed its policy orientation, shifting the emphasis from equity to efficiency. The years since have marked a period of rapid economic growth and rising living standards that are unprecedented in Chinese history. Equally important, no province has been excluded from the growth club. Every one of China's provinces has experienced substantial real growth in the post–1978 period. While economic conditions have improved in all regions in absolute terms, however, performance in relative terms has varied markedly among the regions.

In the next section, I describe these regional disparities in detail and consider whether China's recent economic reform has ameliorated or contributed to regional disparity.

Changes in regional disparities since 1978

As a vast country, China has always shown significant geographical variation in economic development. In order to examine whether China's market-oriented reform has ameliorated or aggravated existing regional inequality, it is necessary first to identify the indicators of economic development, as well as the methods for measuring regional disparity in economic development.

Measurements of regional disparity

In this chapter, per capita gross domestic product (GDP) is used as the indicator of the overall level of development and well-being. GDP measures the value of the goods and services produced in a region during a given period. Through the production of goods and services, incomes are created. Therefore, the per capita GDP of a region can serve as an estimate of regional economic welfare in much the same way as the per capita GDP of a country can be used to measure national economic welfare.

Calculating regional per capita GDP

If GDP is used as an estimate of regional welfare, we need to be able to accurately calculate and compare GDP per capita across provinces. Measuring comparative levels of GDP involves use of two indices:

- 1 standard deviation;
- 2 the coefficient of variation.

What does each index represent, and how is each calculated?

If a country were composed of only two regions, the per capita GDP differences between regions A and B could be measured by two methods. One measures 'the absolute gap', or the difference in per capita income between A and B. The other measures 'the relative gap', or the ratio of the per capita income of A to the per capita income of B. When a country has more than two regions, as China does, then summary measures are needed to index the overall absolute and relative gaps. The standard deviation (SD) is used to measure absolute disparities and the coefficient of variation (CV) to indicate relative disparities. The standard deviation (SD) is the yardstick of the overall absolute regional inequality, and the coefficient of variation (CV) is the yardstick of the overall relative regional inequality. In both indices, a higher value means larger regional differences. The following equations describe how these measurements are calculated.

If n (n = 1, 2, 3 ... n) denotes the number of regions and x_i the per capita GDP of the ith region, it is easy to calculate the average per capita GDP in the nation:

$$x = \sum x_i/n$$

Then the standard deviation is:

$$SD = [\sum (x_i - x)^2 / n]^{1/2}$$

And the coefficient of variation is given by the equation:

$$CV = SD/x$$

Economists normally prefer the relative measure to the absolute measure in depicting trends of regional convergence or divergence. From a political point of view, this may not be a sensible choice, because it is possible for relative disparities to narrow while absolute disparities widen. We take the view that people are more concerned about the absolute difference in economic welfare than about the relative difference. If absolute gaps indeed have a greater effect on people's perceptions of regional disparity and thereby are politically more relevant, it is essential to include an absolute measure in any study of regional disparities.

Once it is known how to measure regional disparities in both relative and absolute senses, it is easier to assess changes in inter-provincial inequality and begin to discern patterns of regional inequality.

Discerning trends of regional development and inequality from 1978 to 2004

Figure 4.1 presents data on per capita GDP in China's 30 provinces for 1978 and 2004, the starting year of the reform and the last year for which data are available, respectively.

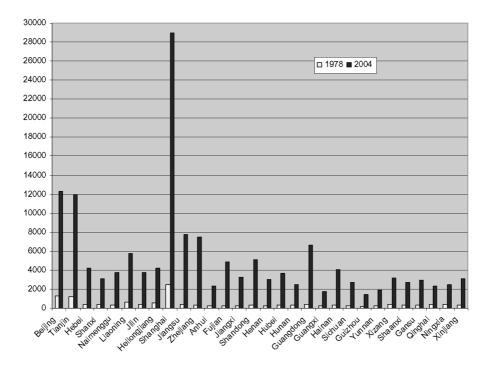


Figure 4.1 Per capita GDP, 1978 and 2004 (1978 constant price)

Source: SSB 2005

As can be gleaned from Figure 4.1, regional gaps existed even before China embarked on reforms. In 1978, per capita GDP in Guizhou, China's poorest province, amounted to only 175 yuan, less than one half of the national average. At the other end of the spectrum, per capita GDP in Shanghai, China's leading industrial centre, was almost seven times the national average and more than fourteen times that of Guizhou. Even if we exclude the three metropolitan centres (Beijing, Tianjin and Shanghai) and compare Guizhou with Liaoning, the fourth richest province, the latter's per capita GDP was still 3.87 times that of the former.

Twenty-six years after the introduction of market-oriented reforms, Shanghai and Guizhou were still China's richest and poorest areas. Moreover, the same areas remained at the very top (Shanghai, Beijing, Tianjin) and very bottom (Guizhou, Guangxi, Yunnan) of the development scale in both 1978 and 2004. However, this does not mean that the regional pattern of economic development has not changed in the intervening years. Figure 4.1 also clearly indicates that coastal provinces, such as Guangdong, Zhejiang, Jiangsu, Fujian and Shandong, were able to make much headway during the reform period. Consequently, an unmistakable geographical pattern of regional inequality has emerged: the coastal provinces are better off than the central provinces, which, in turn, have surpassed the western provinces.



Figure 4.2 Coastal, central and western regions of China

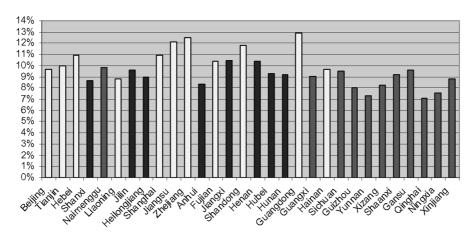


Figure 4.3 Average growth rates of per capita GDP, 1978–2004

Source: SSB 2005

Figure 4.2 categorises China's provinces into these coastal, central and western regions.

It is, of course, impossible to discern any long-term trends by looking at figures for two years, twenty-six years apart. We therefore turn from the starting and ending points of the study to looking at the whole 26-year period. Since a province's growth rate is the most important factor that affects changes in its relative position within the nation as a whole, we start with an examination of regional growth differences. The growth rates for all provinces over the 26-year period are presented in Figure 4.3.

Figure 4.3 reports the average annual growth rates of real per capita GDP in thirty provinces and municipalities from 1978 to 2004. All seem to have grown rapidly. Even the slowest-growing province, Qinghai, was able to grow at 7.04 per cent annually, a respectable growth rate for any economy. However, provincial growth rates diverge widely around the national average (9.63 per cent), varying from 7.04 to 12.93 per cent. In general, the growth rates of western provinces were relatively low. In none of them did annual growth rate exceed 10 per cent. The growth rates of most western provinces were below 9 per cent. In contrast, the fastest growth rates were all observed in coastal provinces (Zhejiang, Guangdong, Fujian, Jiangsu, Hainan and Shandong). Central provinces tended to grow more slowly than coastal provinces but faster than western provinces.

How is per capita GDP dispersed across regions?

Since our main interest in this study is in changes in the distribution of per capita GDP across regions, we now turn our attention to investigating whether China's market-oriented reform has reduced the dispersion of per capita GDP. Figure 4.4 plots two measures of relative dispersion. Both are coefficients of variation (CV) of per capita GDP (in 1978 constant price).

The top and bottom curves of Figure 4.4 differ only in sample size: the former includes Beijing, Tianjin and Shanghai, whereas the latter excludes the three cities. We separate the two curves for a simple reason: although the three metropolitan areas enjoy provincial status, it would be problematic to treat them in the same way as we treat the rest of the provinces, because they are far more urbanised and industrialised than the others. As a result, they enjoy extraordinarily high levels of per capita GDP relative to the national average. For this reason, treating these metropolitan areas as ordinary provinces may greatly bias our analysis of regional disparities. In order to present an unbiased picture, it is necessary to segregate two sets of statistics – one including the three cities and the other excluding them. As Figure 4.4 reveals, changes in regional disparities display different patterns when the three cities are excluded.

The top curve represents changing coefficients of variation for the whole nation during the period 1978–2004. The time path yields a U curve. In other words, relative dispersion declined sharply between 1978 and 1990–91, but the falling trend was reversed afterwards. The years since 1991 have witnessed an upsurge in regional inequality. As noted, a higher CV means greater relative disparities.

The bottom curve (excluding figures for Beijing, Tianjin, and Shanghai) yields two noteworthy changes in coefficients of variation. First, the CV becomes much smaller. Rather than fluctuating between 0.80 and 1.05, it now oscillates in the neighbourhood of 0.35–0.45. In other words, once extreme cases are excluded, relative dispersion in per capita GDP does not appear to be alarmingly large in China. Second, the patterns of change in CV are different. Regional dispersion decreased only marginally in the initial years of reform, but the years following 1985 saw a steady increase in relative dispersion, especially after 1991. Conse-

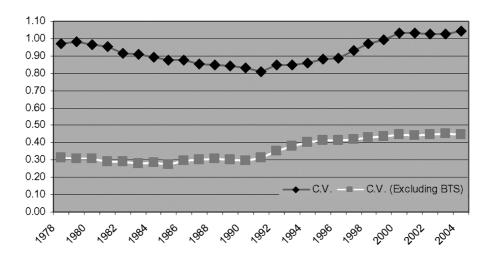


Figure 4.4 Coefficient of variance of regional per capita GDP, 1978–2004 Source: SSB 2005

quently, the CV at the end of the period was 0.14 percentage points higher than that in 1978 (increasing from 0.31 to 0.45).

Mainstream economists have long argued that regional disparity is an abnormal phenomenon that will not last. Although there is no way for them to deny the presence and persistence of spatial inequality in many parts of the world, they envision a long-term trend toward inter-regional equality. In 1965, Jeffrey Williamson published an article titled 'Regional Inequality and the Process of National Development: A Description of the Patterns'. Drawing on a large set of cross-sectional and time series data, Williamson identified 'a systematic relationship between national development levels and regional inequality', or an inverted 'U' in the national growth path; that is, regional gaps tended to increase in earlier stages of development and to diminish in later stages. Since then, the inverted-U-shaped pattern of regional development has often been called 'the Williamson law'.

China, however, does *not* support Williamson's inverted U hypothesis. Neither of the two curves in Figure 4.4 is inverted-U-shaped. Instead, they reveal that, as market forces play a bigger and bigger role in Chinese economy, regional inequality has worsened.

When relative dispersion grows, it is impossible for absolute dispersion to narrow. Figure 4.5 makes this abundantly clear. Here, the absolute dispersion of per capita GDP is measured by standard deviation (SD). The figure again plots two sets of SDs, one covering all the provinces and the other excluding Beijing, Tianjin and Shanghai. Both curves point to the same conclusion: absolute dispersion increased continuously throughout the whole period and accelerated after 1991.

To sum up the above findings, it seems fair to divide the years after 1978 into three sub-periods. Before 1985, the general trend was for relative dispersion to diminish. Even though absolute dispersion was still on the rise, it increased at a slow pace. The early trend came to a halt during the second half of the 1980s. The

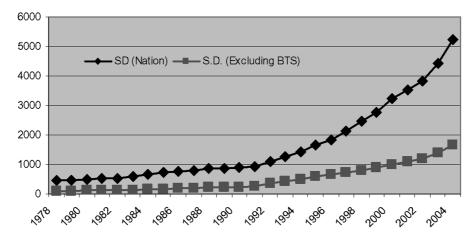


Figure 4.5 Standard deviation of per capita GDP, 1978–2004

Source: SSB 2005

overall relative dispersion continued to fall if the three centrally administered metropolises were included. However, once we controlled for the effects of the three extreme cases, a different picture emerged: the relative dispersion among the rest of the provinces began to grow, albeit only marginally. In the meantime, the absolute dispersion was increasing at a faster rate than it had been. After 1991, there was strong evidence of a secular increase in regional disparity, no matter which measure was used and whether or not the three big cities were counted. Having experienced convergence from the late 1970s to the early 1980s and stabilisation in the degree of regional inequality in the second half of the 1980s, China seems to have entered a period of divergence.

Disparities between Han Chinese provinces and ethnic minority provinces

Although Chapter 7 of this book is devoted to the topic of minority nationalities, a few words may be in order here about economic disparities between Han Chinese and minority nationalities. In China, five 'minority' provinces are designated as autonomous regions (Tibet, Xinjiang, Inner Mongolia, Guangxi and Ningxia). In addition, in three provinces (Yunnan, Guizhou, and Qinghai) minority nationalities comprise over one-third of the population. In 1978, among these eight provinces, only Qinghai enjoyed a level of per capita GDP higher than that of the national average. Tibet and Ningxia were below the average but came close to it. The other five were well below the national average. During the reform period, however, Qinghai and Ningxia were among the slowest growing provinces. The other minority-concentrated provinces did not do well either. Except for Xinjiang, their annual growth rates of real per capita GDP were all lower than the national average. As a result, all minority-concentrated provinces, except Xinjiang, found their relative positions in the nation worsened. And, by 2000, in none of the eight provinces was per capita GDP higher than the national average. The huge gaps between minority-concentrated areas and Han areas have led a professor at the South-Central Institute of Ethnology to conclude: 'In the final analysis, regional disparities in today's China are disparities between Han areas along the east coast and minority-concentrated areas in the west' (Yang 1996).

Intra-provincial inequality

In addition to inter-provincial differences, intra-provincial variations have been characteristic of China. In a country where a province often has the size of a territory and a population comparable to that of a middle-sized country, substantial intra-provincial inequality is to be expected. A county in a rich province, for instance, is not necessarily rich. The broad picture delineated by aggregate data may mask sharp internal variations. Thus, studying intra-provincial disparities may help us identify conditions and trends disguised by aggregate data.

To illustrate intra-provincial variations, regional variations within Guizhou and Guangdong can be analyzed. Due to space and data limitations, I focus only on one year – 2000. Although Guangdong is about the same size as Guizhou, its population was more than twice as large. In its level of economic development, Guizhou fell far behind Guangdong, with total GDP reaching only 10.4 per cent of

Guangdong's. In 2000, Guizhou's per capita GDP was the lowest in China, whereas Guangdong's was among the highest.

Despite the big differences between the two provinces, Table 4.1 shows that they shared two common features. First, relative dispersion was very large *across counties* in each province. The coefficients of variation of per capita GDP were as high as 1.04 in Guizhou and 0.75 in Guangdong, both of which were higher than the corresponding CV measuring inter-provincial inequality in the same year when Beijing, Tianjin and Shanghai were excluded. The ratio of the richest county/city to the poorest county/city was approximately 23:1 in Guizhou and 18:1 in Guangdong. Second, absolute dispersion was even more striking. The standard deviation of per capita GDP was 3,144 yuan in Guizhou and 5,878 yuan in Guangdong. The difference in per capita GDP between the richest county/district and the poorest county/district was 18,618 yuan in Guizhou and 29,824 yuan in Guangdong.

The two cases reveal that significant regional inequalities may be found within poor as well as rich provinces. From the standpoint of the nation, Guangdong was one of China's most rapidly growing provinces during the period 1978–2000 and, by 2000, one of China's most affluent provinces. Yet, there were considerable variations even within such an advanced province. The two cases also hint that changes in regional disparities observed at the county level may not correspond to those at the provincial level. Therefore, anyone who studies China's regional disparities should not lose sight of the importance of intra-provincial inequalities.

Table 4.1 Intra-provincial inequality: Guizhou and Guangdong, 2000

	Guizhou	Guangdong
Number of counties/districts	87	122
Min* (yuan)	832	1 789
Max (yuan)	19 450	31 613
Mean (yuan)	3 016	7 847
SD (yuan)	3 144	5 878
CV	1.04	0.75
Max/Min	23.38	17.67
Max-Min (yuan)	18 618	29 824

Source: SSB 2001

^{*} Here 'Min' (minimum) means the average income of the poorest county in a province. Similarly, 'Max' (maximum) means the average income of the richest country in a province.

The economic causes of uneven regional development

Regional disparities persist because growth rates of output have varied widely across regions. As shown in the last section, growth rates across China's thirty provinces exhibit tremendous variance and some regional economies have grown much faster than others. Why have growth rates differed? What have been the factors underlying differential economic growth performances among provinces? These questions are addressed in this section.

It goes without saying that economic growth is governed by many determinants – economic, social, political, and cultural. However, if these diverse factors are to affect economic growth positively, they must somehow help either increase the supply of factor inputs (mainly capital and labour) or enhance factor productivity. Thus, to arrive at an understanding of the factors behind the growth of output, we must first identify the immediate economic sources of growth. I argue that the acceleration in capital investment is the most important engine of growth for all Chinese provinces.

Proximate sources of output growth

Any explanation of growth variations in China needs to consider the cause and effect links between proximate growth and ultimate growth. What is meant by 'proximate' and 'ultimate' growth? To understand these terms, it is necessary to first assume that any growth in output is generated by growth in input, or by gains in the efficiency with which the inputs are used, or by some combination of the two. Two types of input are indispensable for output growth, labour input and physical capital input. Increases in input or gains in efficiency that result in output growth are called the 'proximate' sources of growth. In this section, we are most concerned with examining the proximate sources of growth as an explanation of differential growth in provinces. Other factors that may determine growth (such as governmental policy, religious beliefs, attitudes toward income and leisure, the international environment) enhance or hinder the proximate sources of growth. These other factors are known as the 'ultimate' causes of growth.

In the last decade or so, economists in China and elsewhere have conducted extensive research trying to break down the proximate sources of output growth and examine the contributions of labour and capital to output. They generally arrive at two principal conclusions.

First, the contribution of labour input to economic growth was insignificant in China. Here, labour input is measured not only by the total number of working persons but also by such indicators of labour quality as the age and gender composition and the educational and health profiles of the labour force. A World Bank study, for instance, attributed only about 17 per cent of growth to improvements in both quantity and quality of the labour force in the Chinese economy as a whole (World Bank 1997). An abundant labour supply may explain the relatively small contribution of labour in China. It is intuitively plausible that, in a capital-scarce

and labour-abundant economy, the injection of more human resources would not increase output very significantly and rapidly.

Second, rapid capital accumulation alone can account for a very substantial part of GDP growth for each and every province of China. This finding confirms the central importance of capital accumulation for growth at early stages of economic development, a position held by such prominent economists as Domar (1947), Harrod (1948), Lewis (1955) and Rostow (1960). It is also consistent with the results of many empirical studies of economic growth. Furthermore, the role of capital in the explanation of growth in China was very similar to that found in other East Asian economies and in developing countries at large.

Figure 4.6 shows average growth rates for per capita GDP and investment for the period 1985–2004 in all provinces. Although there are some exceptions (such as in Guangxi and Yunnan), higher rates of investment generally correlate with higher GDP rates.

In addition to increasing the stock of physical capital, capital investment may generate technological progress. Given that most technological progress requires a substantial investment of resources, we would expect that an acceleration of the pace of capital accumulation, by reducing the age of the capital stock, speeds the rate at which embodied technical progress can be incorporated into production. Indeed, numerous studies have established that investment in physical capital is the principal means by which new technology enters the production process (e.g. Lau 1996; Romer 1990; Grossman and Helpman 1991; Barro and Sala-i-Martin 1994). In particular, foreign investment may embody more advanced production technology and management practice than domestic investment does.

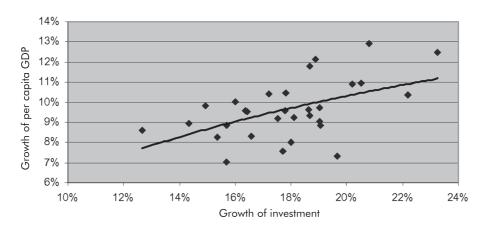


Figure 4.6 Average growth rates of per capita GDP and investment, 1985–2000

Source: SSB 2005

Sources of capital accumulation

Since capital investment is the key to economic growth, regions with greater capital mobilisation capacity are expected to grow faster. Why then has gross investment increased at much faster rates in some provinces than in others?

By China's official definition (SSB 2001), capital investment is financed from one of the following five sources of funds or their combinations:

- 1 state budgetary appropriation;
- 2 domestic bank loans;
- 3 self-raised funds:
- 4 other domestic funds;
- 5 foreign capital.

We may reclassify these sources of capital investment into three broad categories:

- 1 local capital;
- 2 capital inflow from, or outflow to, other provinces;
- 3 foreign capital.

By definition, capital investment in a province depends on its ability to mobilise local capital, to obtain capital imports from other provinces, and to attract foreign capital. If variations in capital investment between provinces are to be explained, we need to understand why some provinces are more capable of mobilising local capital and of obtaining capital inflows from other provinces and from other countries.

Local capital

Local capital refers to capital originating within the province. Data show that the volumes of investment and the volumes of saving were highly correlated in all the provinces of China. Such a high correlation suggests that domestic investments in most provinces were predominantly financed by local savings. The higher the local savings, the higher the local domestic investment. To put it differently, a high level of provincial domestic investment was not possible unless the province was able to achieve a higher level of local savings.

What were the determinants of local savings? Empirical studies found that the income level was a major predictor. There was a strong correlation between the saving rate (saving/GDP) and per capita GDP for China's provinces. As per capita GDP grew, the saving rate increased in almost all provinces. And, at any given moment, provinces with higher per capita GDP tended to enjoy higher saving rates. With both higher per capita GDP and higher savings rates, obviously, rich provinces were in a much better position to mobilise funds and to invest in their local economies.

Inter-province capital inflow/outflow

If a country is the unit of analysis, a high level of domestic investment is only possible with a commensurate high level of domestic savings. For the regions within a country, however, such a relationship is expected to be much weaker, because the central government may play a strong redistributive role, allocating funds across regions through fiscal transfers, and/or because capital movement between regions is supposed to face fewer barriers in the context of a national economy than in an international context. Thus, it is possible for a region with a relatively low level of savings to invest at a much higher level, as long as it is able to obtain and/or attract capital inflows from other regions.

In China just as in other countries, there were certainly times when capital moved from one province to another. Which provinces were 'exporters' of capital? Which provinces were recipients of capital imports? The direction of inter-provincial capital flows may be gauged by examining data on 'net export', defined as the difference between a province's total savings and the total investment in the province. If a province saves more than it invests locally, it is investing outside of the province. Conversely, if the total amount of investment in a province exceeds its total savings, it must have received capital imports from somewhere else.

Capital is expected to flow from relatively advanced provinces to less developed provinces. This was found to be true in the early years of reform. Between 1978 and 1984, the provincial ratios of net export to GDP had fairly strong correlations with their per capita GDPs, which meant that rich provinces were exporting capital to poor provinces during this period. After reform programmes were introduced into urban areas in 1984, however, the correlation between the two variables significantly weakened. By the middle and late 1990s, there was virtually no correlation between the two variables at all (Wang and Hu 1999: 162–3). In other words, although there were still capital-surplus and capital-deficit provinces, the level of development could no longer serve as a predictor of whether a province was a capital exporter or a capital recipient.

China's market-oriented reform not only changed the direction of interprovincial capital flows but also substantially reduced its volume. When the reform started in the late 1970s, there appeared to be a massive inter-provincial movement of capital. Capital outflow from Shanghai, for instance, amounted to nearly 60 per cent of its GDP for the period 1978–80. Meanwhile, Qinghai and Ningxia received capital inflows that were equivalent to about 40 per cent of their GDPs. Inter-provincial movement of capital began to slow down in the 1980s. Proportionally, capital-surplus provinces exported much less than they used to.

Consequently, capital-deficit provinces were no longer able to obtain as much help from other provinces as before. By the early1990s, capital seemed to have become very 'sticky', tending to stay where it was originally generated. Except for Shanghai, no province now exported more than 10 per cent of its GDP to other provinces. At the same time, only five provinces were still able to receive capital imports that amounted to more than 15 per cent of their GDPs. Four of them (Tibet, Qinghai, Ningxia and Xinjiang) happened to be minority-concentrated autonomous regions (Wang and Hu 1999: 164–5).

The most important change in inter-provincial capital movement during the reform period, especially after the mid-1980s, seems to be that all provinces had become financially more independent. Rich provinces now did not have to transfer much locally generated savings to other provinces. Several rich provinces, such as Beijing and Tianjian, had actually become net recipients of capital from other provinces. With more capital left at their disposal, the rich provinces' ability to increase local investment was undoubtedly strengthened. Poor provinces were forced to become financially more self-reliant. As capital inflows from other provinces dwindled, they had to rely increasingly on local savings to finance local investments. Given their relatively low per capita GDP and low saving rates (and thereby per capita saving), poor provinces were unlikely to achieve as high rates of capital accumulation as rich provinces were.

Foreign capital

Whereas foreign capital was completely absent in pre-reform China, its role has become increasingly visible after 1978. In the early years of reform, foreign capital came mainly in the form of grants and loans from foreign governments, international organisations, and international capital markets. At that time, the central government played a dominant role in allocating foreign capital. Since the promulgation of the Provisions for the Encouragement of Foreign Investment in late 1986, foreign direct investment (FDI) has been growing continuously. Especially after 1991, China has become the largest recipient of FDI among all developing countries. As FDI inflows surpassed the combination of foreign grants and loans, the share of foreign capital channelled directly to provinces has increased sharply in the last decade.

All provinces welcomed foreign investment, because it would augment their capital and investment stocks. But not all of them were equally successful in attracting foreign investors. As Figure 4.7 shows, the spatial distribution of foreign capital in China was highly uneven.

Of the total accumulated amount of foreign capital that China's provinces received up to 2000, Guangdong Province alone took nearly 30 per cent. Fujian, Shandong, Jiangsu, Zhejiang, Shanghai and other coastal provinces were also able to attract substantial amounts of foreign capital. In contrast, the records of inland provinces were rather poor. Altogether, they received 18 per cent of foreign capital.

What were the determinants of the spatial distribution of foreign capital in China? Two factors have been identified as the most important. One is market size measured by provincial GDP. The greater the local market, the greater the opportunity for foreign investors to make profit and the higher the incentive for them to invest. The other is preferential policy. From the very beginning, China's foreign investment regime has been 'heavily slanted in favor of cities along the coast' (Broadman and Sun 1997: 8). For instance, for quite a long time, only coastal provinces were allowed to provide fiscal incentives for foreign investors. Even among coastal provinces, some (e.g. Guangdong) enjoyed a more generous package of incentives than others. Thus, it is not surprising that the provinces that can offer

UNEVEN ECONOMIC DEVELOPMENT

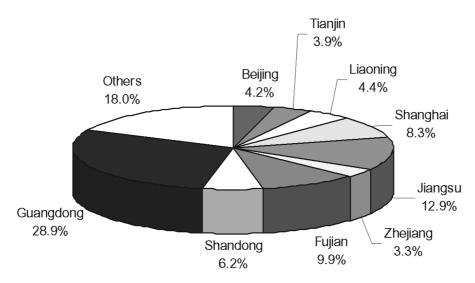


Figure 4.7 FDI distribution by region, as of 2000

Source: SSB 2001.

generous incentive programmes tend to attract more foreign capital (Wang and Hu 1999: 155–62).

In summary, in China, a province's investment depended on three sources of capital: local savings, capital inflows from (or capital outflows to) other provinces, and foreign savings. Local savings were primarily determined by the level of economic development. Therefore, advanced provinces had a decisive edge in mobilising local savings over other provinces. This advantage was discounted in the early years of reform, because at that time advanced provinces had to export substantial proportions of their local savings to relatively poor provinces. However, as reform proceeded, they were allowed to keep more and more local savings to themselves. As a result, their ability to increase local investment was strengthened at the expense of poor provinces that used to benefit from inter-provincial capital flows. Moreover, it was precisely the same provinces with relatively strong ability in mobilising local savings that were in foreign investors' good graces.

The political causes of uneven regional development

The previous section raises two crucial questions, but leaves them unanswered. Why did inter-provincial capital flows plunge in the course of economic reform? Why were coastal provinces able to find favour in the eyes of foreign investors? To answer these questions, this section turns to political factors that affected the direction of capital flows. In particular, we analyse how the central government's regional preference and extractive capacity affect the spatial distribution of investment resources and ultimately the growth potential of different provinces.

Government intervention: revenue collection vs egalitarianism

In a world where government intervention was absent, capital would presumably move across regions to seek no objective other than the maximisation of its return. And the direction of capital movement would be determined only by such economic factors as regional climate and terrain, endowment in natural resources, geographic location, infrastructure, the quality of the labour force, market size, and so on. However, no such world exists. In no country is capital mobilisation and allocation completely left to the free play of pure economic forces. Every government in the world pursues some sort of regional development policy by guiding or inducing capital investment in a certain direction. This is especially true in China, a country where central planning once prevailed. Since government plays an important role in facilitating or restraining capital mobility, any story about regional disparities in capital accumulation would be seriously incomplete without taking into consideration the role of government policies or political factors.

Although many have argued that government intervention is essential for narrowing regional disparities, it should be made clear at the outset that government intervention as such does not necessarily help to achieve that goal. In fact, government policies could result in regional convergence just as they could lead to divergence. Whether government intervention will alleviate spatial inequality depends on two variables: the government's willingness to keep regional gaps from growing, and its ability to affect capital flows moving in the direction that would benefit poor regions.

Strictly speaking, all governments want to see the narrowing of regional gaps, as long as it does not involve any cost. If it is believed that regional policies would somehow lower the overall efficiency of their economies, however, some governments may become less willing to trade more equality for less efficiency. Especially if a government subscribes to the logic of the 'trickling down' thesis, it will favour maximal aggregate economic growth and tolerate regional inequality. When the political will to promote balanced regional development is lacking, it is unlikely that the government will allocate capital investment to areas where conditions are not deemed most suitable for high growth.

Even if a government has a strong commitment to egalitarianism, it may still not be able to reduce regional inequality unless it is capable of mobilising, aggregating, and directing the requisite resources to fulfill the goal. In any society, in order to advance its chosen goals, regardless of what those goals may be, the state must overcome the resistance of various groups with competing priorities. Since revenue is an absolute requirement for formulating and implementing any policy, the bottom line is whether the government is able to extract enough resources from the population and allocate them according to its preferences in the face of societal resistance. Without such resources, governments simply cannot govern. Only with adequate resources at its disposal can the government function. The more resources are available to a state, the more options it will have, and the more capable it will become. A capable government can resolve the challenges associated with development far more effectively than a less capable government can under similar circumstances.

UNEVEN ECONOMIC DEVELOPMENT

As far as regional development is concerned, the role of central government should be emphasised. Provincial governments may be able to reduce regional disparities within their jurisdictions. However, they cannot be entrusted with the task of narrowing gaps between provinces. If decision-making were left to provincial governments, the only possible result would be a pattern of resource allocation that simply reflects existing economic disparities. Only the central government may have an incentive to change the pattern by redistributing resources between rich and poor regions. But the central government's ability to perform the function of redistribution crucially depends on its ability to generate revenue. Its financial strength is the economic base for it to implement regional policy. If there are severe fiscal constraints on the number of transfers that the central government is able to direct, its regional policy cannot be very effective, no matter how strong its commitment to egalitarianism may be.

It is therefore worthwhile to briefly examine how alternative policy regimes have affected regional disparities.

Mao's China (1949-76)

By and large, the central government enjoyed considerable control over the distribution of resources during the Maoist era. The fiscal system was so arranged that rich provinces had to remit large proportions of their revenues to the central government, and poor provinces were allowed to retain all their revenues and receive additional direct subsidies from the central government. Acting as a re-distributor, the central government could use fiscal transfers to influence the inter-regional flows of resources.

However, this image of the state strongly intervening in capital flows for the entire pre-reform period disguises the variations of central extractive capacity in these years. In fact, four sub-periods within the Mao years can be identified, based on the state's centralised extractive capacity:

- In the early years of the People's Republic (between 1949 and 1956), the Chinese central government greatly strengthened its extractive capacity.
- 2 Between 1957 and 1960, Mao introduced his first decentralisation drive, which resulted in a sharp decline in central extractive capacity.
- 3 The period 1961–6 was one of recovery, during which Beijing re-centralised fiscal power and strengthened its extractive capacity.
- In the first two years of the Cultural Revolution (from late 1966 to the end of 1968), China was in total chaos. While Mao enjoyed absolute personal power, the state lacked the basic ability to exert social control, much less to direct economic development. Public authorities were restored in 1969. But, soon after, Mao initiated yet another decentralisation drive, which again weakened the centre's extractive capacity.

Numerous studies have established that regional disparities in China narrowed somewhat between 1953 and 1957 and in the early 1960s but widened

during the Great Leap Forward (1958–60) and the Cultural Revolution (1966–76). In other words, regional inequality and central capacity were moving in precisely the opposite direction: increasing disparities coincided with declining extractive capacity while decreasing disparities were associated with growing state capacity. Such a relationship is by no means surprising. During the Maoist era, the central government pursued its regional objectives mainly through inter-regional transfers of investment resources. Only with stronger central capacity was greater flow of fiscal transfers from richer to poorer regions possible, which was essential to reduce variations in development across provinces. Conversely, decline of the central financial strength was unfavourable for controlling regional disparities.

Policy changes and regional inequality in the reform period

After Mao's death in 1976, his regional development strategy was criticised as too costly in comparative advantage, production efficiency, and national growth foregone. Underlying the reform that followed was a fundamental transformation of development philosophy. Chinese policymakers thus gave top priority to rapid aggregate growth. This predominant concern with growth made them less willing to sacrifice growth for such goals as balance and equity. Instead, they were ready to tolerate a certain degree of inequality or widened disparity. It was believed that if certain regions were allowed to prosper first, their affluence would eventually trickle down to other regions.

Whereas in the West, believers of the 'trickle-down' theory generally hold that government should not intervene in the course of economic development, their Chinese counterparts actually advocated government intervention on behalf of more developed regions. In their view, China, as a developing country, had to make the best use of extremely scarce capital. Therefore, it was necessary for the government to concentrate investment resources where conditions were most suitable for growth.

Since the coastal provinces enjoyed considerable advantages at the beginning of the reform period (a large number of skilled workers, a high level of technology and managerial sophistication, and relatively well-developed infrastructure), these areas received the State's economic blessing. These provinces also had much easier access to foreign trade and the closest ties to overseas Chinese, an important source of capital and business know-how. Concentrating investment resources in these areas clearly offered the prospect of much more rapid aggregate growth than spreading resources thinly or investing in interior areas where the preconditions for modern growth were still lacking.

The 'gradient theory' of development

For these reasons, a so-called 'gradient theory' (*tidu lilun*) dominated the thinking of Chinese policymakers for much of the 1980s. The theory divided China into three large geographic regions – the eastern (coastal), central, and western – and likened them to steps on a ladder. According to the 'theory', the government should capitalise on the advantages of the coast first. Only after the coast became

sufficiently developed should attention be turned to the central region. The western region, however, would have to wait patiently for its turn. If this strategy had unfavourable implications for equity, its advocates advised people to consider its effects in the long term. In the long term, the 'theory' promised, the fruit of development would eventually come down to everyone in the country.

In the pre-reform period, nearly two-thirds of state capital investment went to the central and western provinces, whereas the coastal provinces received only 36 per cent. After 1979, the centre of gravity in state capital investment shifted from the interior to the coast. In the period 1979–91, for instance, the coastal region as a whole received over half of all state capital investment, while the interior's share shrank to about 43 per cent. The western region suffered the greatest loss, its share falling more than 7 per cent. At the provincial level, while the shares of nearly all coastal provinces went up, the shares of most interior provinces fell. The interior provinces whose shares did not drop tended to be minority-concentrated autonomous regions, for which the central government might have offered special assistance (Wang and Hu 1999: 175–7).

As anyone could imagine, competition for central investment among the provinces was extremely keen, as the pressure for rapid growth was building up during the reform period. The emergent distribution pattern of state capital investment, however, did not show any egalitarian strand that would narrow the gap in investment resources between needy provinces and their richer counterparts. Instead, provinces that had greater resource mobilisation capacity were placed in advantageous positions in the race for central investment. Such a location bias of central investment can be explained only by the central government's policy preference.

Preferential investment policies for coastal areas

The new leadership's growth-first strategy was also reflected in its decisions to open up certain areas along the coast to foreign investors and grant them preferential treatment in varying degrees:

- Special Economic Zones (SEZ). In 1980, four SEZs were created in Shenzhen, Zhuhai, and Shantou in Guangdong Province, and Xiamen in Fujian Province. In 1988, Hainan Island was separated from Guangdong Province and the entire island was designated the fifth SEZ. In 1990, Shanghai's Pudong was also granted similar special privileges enjoyed by SEZs.
- Coastal Open Cities (COC). In 1984, the government decided to open fourteen coastal cities to foreign investors. They included nearly all the major port cities along China's coast, stretching from Dalian in Liaoning in the north to Beihai in Guangxi in the south.
- Economic and Technological Development Zones (ETDZ). From 1984 to 1988, twelve ETDZs were established near some of the open cities. After 1992, an additional eighteen ETDZs were set up. All thirty ETDZs were located in coastal provinces except one each in Jilin, Heilongjiang, Hubei, Anhui and Sichuan.

- Coastal Economic Open Zones (CEOZ). Between 1985 and 1988, five huge CEOZs were created in the Yangzi, Pearl, and Yellow River deltas, southern Fujian and Liaodong Peninsula. Altogether, they covered 260 cities and counties.
- Customs-Free Zones (CFZ). From 1990 to 1993, the government approved the establishment of thirteen CFZs in Liaoning, Tianjin, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Hainan and Guangdong.

To encourage foreign investment on the coast, the central government gave coastal areas special autonomy in a wide range of economic decisions, including the authority to approve large-scale investment projects, the freedom to grant tax concessions to foreign investors, and the right to retain a higher proportion of earned foreign exchange. These privileges enabled coastal areas to offer more incentives to potential investors than interior areas could achieve. Combined with the coast's naturally and historically advantaged position, these policies insured that much of China's foreign investment took place along the coast.

In sum, the bias of the top policymakers explained why the central government poured an increasing proportion of its own investment resources into coastal provinces and why it went out of its way to help the same provinces to lure foreign investment. The large influx of investment resources in turn made it possible for coastal provinces to grow at faster rates than others did. There is little doubt that the central government's pro-coastal bias was an important factor contributing to the worsening of regional inequality.

The central government's policy preference is indeed a fairly good predictor of changes in regional disparities in the 1980s. Although the 'growth-first' philosophy has served as China's guiding principle for development since 1978, the central government's policy has not been hard and fast. Rather, several minor and major changes occurred in the government's development strategy, which somehow coincided with changes in regional disparities depicted by the bottom curve of Figure 4.4.

The shift of regional development priority began as soon as Deng Xiaoping consolidated his power in 1978. In the last three years (1978–80) of China's Fifth Five-Year Plan, coastal provinces' shares of state investment steadily increased. During the following Sixth Five-Year Plan period (1981–5), China officially adopted a pro-coastal policy programme. Yet, old ideas died hard. The remnants of the previous balanced development strategy could still be seen in the new plan. Although its main goal was to accelerate the development of the coastal region, the importance of bringing along the interior provinces was not entirely ignored. Nevertheless, coastal provinces' shares of state investment continued to grow in the period. The same period also witnessed the introduction and expansion of the 'open-door' policy, which primarily benefited southern coastal provinces. The fast growth of these provinces rapidly narrowed the gaps between southern coastal (e.g. Guangdong and Fujian) and eastern coastal provinces (e.g. Shanghai, Jiangsu and Zhejiang) regions, thus leading to the reduction of overall regional disparities in the early 1980s.

In the second half of the 1980s, the central policymakers' pro-coastal policy orientation became more pronounced. The 'gradient theory' discussed above became the cornerstone of China's Seventh Five-Year Plan (1986-90). For the first time, the government divided China into three regions: coastal, central and western. According to the plan, the investment priority for the rest of the twentieth century would be placed on the coast. The central region might be allocated some investment resources in energy and raw materials in so far as they were necessary for supporting the development of the coast. As far as the western region was concerned, its development would have to be 'postponed', at least for the time being. The Chinese Government's pro-coastal policy orientation was further strengthened in 1988 when it announced an explicit 'coastal development strategy'. To speed up the country's aggregate growth, the government now decided to open the whole coastal strip to foreign investors. Coastal provinces were even encouraged to seek their raw materials from foreign sources and sell their products to the world market, though doing so might run a risk of severing their links with interior provinces. As is clearly shown in Figure 4.2, the central government's strong pro-coastal bias in the late part of the 1980s resulted in the worsening of regional disparities.

Policy shifts in the 1990s

The widening regional gaps gave rise to criticism of the government's pro-coastal bias in the late 1980s and early 1990s, which forced the government to adjust its policies when preparing the Eighth Five-Year Plan period (1991–5). The 'gradient theory' was quietly abandoned. Although the government still vowed to continue its pro-coastal development strategy, it began to recognise the importance of preventing regional gaps from becoming excessively large. As a result, numerous interior development zones were established, and dozens of interior cities designated as 'open cities' in the early 1990s. Another major adjustment was to switch the focus of coastal development from the south coast (Guangdong and Fujian) to the east coast (Shanghai and the Yangtze River Delta).

Deng Xiaoping endorsed the second change but viewed the first as unnecessary. During his famous 1992 tour to south China, for instance, he warned: 'Do not throw obstacles in the way of areas that can grow fast. Areas with the potential for fast growth should be encouraged to develop as rapidly as they can' (Deng 1992). In his view, it was unwise to tackle the issue of regional disparities too early. He suggested China wait until the end of this century before putting this issue on the agenda.

However, the regions that had been left behind could not wait any longer. At the annual sessions of the National People's Congress in 1993 and 1994, more representatives from interior provinces, especially those from the west, began to express their grievances with the planning bias. In 1994, a report by the State Planning Commission sounded a serious warning that if problems caused by growing regional gaps were not settled properly, they might one day become a threat to China's social stability and national unity. Facing growing pressure from

interior provinces, the central government finally decided to reverse its coastal development strategy in 1995. The new guiding principle was to 'create conditions for gradually narrowing down regional gaps'. This principle was embodied in China's Ninth Five-Year Plan (1996–2000), which promised to increase central support to the less-developed regions in the central and western parts of the country. In September 1999, China formally launched the Western Development Programme (*Xibu da kaifa*).

The Western Development Programme

The Western Development Programme is aimed at gradually narrowing the socioeconomic gaps between the coastal provinces and the western provinces. Given the huge existing gaps, it is unrealistic to expect that these disparities will disappear overnight. At present, the best China can do is to halt the trend of growing regional gaps. It may take several years before the trends can be reversed, and at least fifteen to thirty years before the regional gaps can be substantially reduced. The key aim of the Western Development Programme is to improve the development potential of the western region. Western provinces have been poor because many preconditions of modern growth, such as transportation and communications facilities, power and water supply, and human resources, are lacking. Thus, to promote faster economic growth in the western region, the Chinese government focuses on three things (www.chinawest.gov.cn):

- 1 improving infrastructure;
- 2 improving education;
- 3 facilitating factor mobility.

In the final analysis, any regional policy that cannot generate a process of self-sustaining economic growth in lagging areas should be regarded as a failure. However, indigenous development is possible only if backward regions are able to attract new economic activities. The improvement of infrastructure and education will certainly create more attractive conditions for such activities to come in, but such a change alone is hardly sufficient. External capital, for instance, will not flock to less-developed regions simply because infrastructure facilities and human resources are as good as those available in the developed areas. To facilitate the mobility of production factors (capital, technology, labour and talent) in ways beneficial to the western regions, the central and provincial governments have gone out of their way to lure Chinese and overseas business establishments to set up or relocate plants in the lagging region. Measures of inducement include, among others, locating central projects in western provinces to serve as a generator of expansion, offering preferential taxation policy to both domestic and foreign investors, creating a friendly environment for investment, and so on.

The following websites provide further information on the Western Development Programme and details of specific development and investment projects in the western provinces:

- www.chinawest.gov.cn
- www.xbdkf.com
- www.tdctrade.com/gowest

Declining central extractive capacity

At this point in the discussion it is worth pondering the following: why, despite a re-orientation of the Party's regional development strategy, has there been no sign that regional inequality is narrowing? To answer this question, we have to look at the other key factor that affects spatial distribution of resources: central capacity.

Central extractive capacity is relevant and important in this context because, as the only institution responsible for redistributing resources between regions, the central government must control an adequate amount of revenue before it can conduct any redistributive policy. Strong central extractive capacity may not be a sufficient condition for inter-regional redistribution, as there are instances of governments with strong extractive capacity not doing much redistribution. Nonetheless, it is a necessary condition, because no other institutions, provincial governments included, have incentives to pursue inter-regional redistributive policies.

The Chinese central government's extractive capacity has been critically enfeebled during the course of economic reforms. At the core of Deng Xiaoping's reform programme was decentralisation. While no one denies that the decentralisation of decision-making has been instrumental in generating high economic growth in China over the past two decades, many agree that it has probably gone too far, significantly weakening the central government's capacity to perform functions it is expected to perform, including the movement of investment resources from rich to poor provinces. As Figure 4.8 reveals, despite its 'miraculous' record of GDP growth, China's ratio of overall government revenue to GDP decreased from 31 per cent in 1978 to less than 11 per cent in 1995 and 1996. Although the ratio has rebounded somewhat since 1997, it is still relatively low compared with that of most countries in the world.

As the government share of national income shrank, it was not possible for the government to have much to spare for capital investment. In the pre-reform period, the government budget was used to finance the bulk of capital investments. Not any more. In fact, the deepest cuts to be made to the government budget during the reform era have been made in capital investment. Between 1981 and 1996–7, the share of China's total fixed investment financed by state budget declined sharply, from nearly 30 per cent to almost a negligible 2.7 per cent (see Figure 4.9). It was only after 1997 that the proportion of state appropriations to total investment began to bounce back, albeit marginally.

If we compare Figures 4.8 and 4.9, it is clear that there is a strong and positive correlation between the state share of national income and the budgetary share of investment.

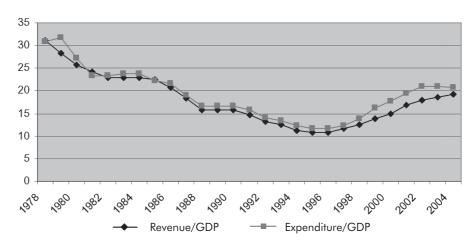


Figure 4.8 Government revenue and expenditure as % of GDP, 1978–2004

Source: SSB 2005

Of course, the central government still enjoys some control over investments financed by other means, such as bank loans, self-raised funds and so on. Economic planning, investment quotas, and project review and approval are some of the instruments that the central government might use to influence the level, structure and direction of investment. However, even if we take into consideration all those factors, central control over investment still appears small and declining, which means that there is less leeway for the central government to redistribute investment resources from rich to poor provinces. A central government with weak extractive capacity cannot be expected to do much in the way of fighting against regional inequality, no matter how committed it is to achieving this goal.

Although since the mid-1990s the Chinese Government has somewhat reoriented its regional investment preferences, hoping to mitigate tensions caused
by growing regional gaps, regional disparities have showed no sign of narrowing.
This is so because the decentralisation unleashed by reforms has significantly
weakened the capability of the central government to mobilise and redistribute
resources. Unable to extract large surpluses from rich provinces as it did before,
the central government finds it difficult to make large subsidies to poor provinces.
Voluntary movement of capital from rich to poor regions has also proved minimal.
While the concentration of investment resources in economically prosperous
provinces has allowed them to gain a good lead in growth, the lack of investment
resources has dampened the growth potential of the backward provinces. The
result is the continued worsening of regional inequality up to now, despite the reorientation of central government preferences. Unless the central government is
able to regain control over the redistribution of resources, the trend of divergence
we have observed in the last decade or so is unlikely to be reversed.

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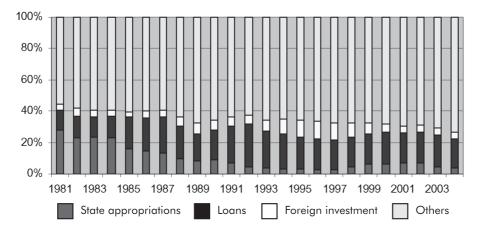


Figure 4.9 Investment by sources, 1981–2004

Source: SSB 2005

Options for addressing regional disparity

If the growing regional inequality in China is the result of biased state policies and enfeebled state capacity that can be altered, then China has no reason to fatalistically let inequalities mount. Equitable growth is not only desirable but also attainable. To achieve more equitable growth in China, the Chinese Government must do two things:

- 1 redress the coastal bias;
- 2 rebuild its extractive capacity.

Redressing the coastal bias

The development bias towards coastal regions is based on the mistaken 'gradient theory' which is morally more outrageous than the infamous 'trickle-down' theory. Whereas the trickle-down theory only opposes government intervention on behalf of the poor, the gradient theory actually advocates government intervention on behalf of the rich. Unless this development bias is removed, interior provinces will have no chance to catch up with coastal provinces. To achieve the goal of maximal aggregate economic growth, the government should deliberately target resources to both to interior provinces and to more needy regions in areas that are already developed. At present, the Chinese Government appears to be shifting its attention to the issue of distributive justice, with the aim of narrowing regional gaps. However, 'getting the policies right' is not enough. A strategy for reducing regional disparities must focus not only on what types of policy are needed but also on how to ensure that these types of policy will be enacted and implemented. Institutional changes are needed to guarantee that the new policies will be implemented and that they will not be later reversed.

Rebuilding extractive capacity

A government's commitment to distributive justice is by itself not sufficient for bringing about real changes. For a government to achieve its desired policy goals, whatever those goals may be, it must be able to mobilise requisite resources from society in the face of resistance by various groups with competing priorities. Without such resources at its disposal, the government may not be able to survive, let alone fulfill its chosen policy objectives (Levi 1988). In general, it can be said that governments with strong extractive capacity are able to pursue their policy goals far more effectively than less capable governments do under similar circumstances. For this reason, we believe that state capacity matters a great deal with regard to income distribution.

In the early decades of the People's Republic, China addressed the problem of regional inequality with some success through inter-regional transfers (Lardy 1980). In recent years, however, such transfers shrank considerably because, unable to mobilise enough resources under an excessively decentralised fiscal system, the central government simply did not have much to spare. When all regions moved toward a higher degree of self-financing, regional disparities were further aggravated. To iron out the variations in average income levels across provinces, the Chinese government must rebuild its extractive capacity so that it can again play a significant redistributive role in the economy. Only when the central government is able to extract large surpluses from rich regions and make large transfers to poor regions can the effects of the initial unequal distribution of resources be offset.

Conclusion

In the first decade of the post-Mao era, when everyone was benefiting from the fast-growing economy and the level of inequality was relatively low, the issue of regional economic egalitarianism almost never arose in China. However, concerns over the distributive effects of the post-Mao reforms began to emerge in the late 1980s. By the mid-1990s, increasing inequality and its possible consequences for social and political instability became a major issue of policy debate and of scholarly research.

This chapter has essentially focused on one type of inequality – inter-provincial. It has examined changes in regional disparities and explored why these changes have occurred. The data presented in the preceding sections point to a conclusion: inter-provincial inequality has been widening. The Chinese economy converged briefly in the early years of reforms, but the trend was soon reversed. Disparity in per capita GDP between China's coastal and interior provinces has been on the rise since 1983. And what is worse, the divergent trend has accelerated since 1990.

Mainstream economists have predicted that, coupled with economic growth, the operation of the free market tends to bring convergence of regional income. According to their theory, in an economy that allows for free factor mobility, capi-

talists will maximise profits by locating their investments in areas of high labour availability and low labour cost, and workers will maximise wages by moving between regions in response to differences in employment prospects and income levels. Thus, labour tends to migrate from regions of high unemployment and low income to regions of low unemployment and high income, whereas capital tends to migrate in the opposite direction. The two contrasting movements will lower the capital-labour ratio in places with initially high ratios and increase the capital-labour ratio in places with initially low ratios. In short, these economists expect regional inequality to be temporary, as long as market forces are unhampered. Eventually, equilibrium will be reached at which returns to factors, or income, are equalised among regions.

The case of China challenges this view. Were the mainstream economic hypothesis correct, the rate of convergence would have sped up in the 1990s, since many restrictions on capital and labour mobility were removed during this decade. The experience of China, however, has revealed that such blind faith in the magic power of markets is nothing but an illusion. Neither capital nor high-human-capital labour seems to have moved in the directions predicted by mainstream economic theory. Instead, market forces have led to the clustering of scarce resources (e.g. capital, high-human-capital labour, information, technology, and the like) in advanced areas. The limited advantages of backward regions (such as cheap labour) are insufficient to offset these agglomeration advantages. This does not mean that convergence is not a possibility. But, if anything, the case of China suggests that convergence is by no means automatic.

Should China's policymakers be concerned about the ominous trend of growing regional inequality? Absolutely. Regional inequality is a politically divisive issue. For one thing, widespread senses of frustration and deprivation might surface in regions where incomes are noticeably lower than in other parts of the country. The residents of those regions might come to view an insufficiently sympathetic central government as partly responsible for their plight. Also, more developed regions might regard any central redistributive intervention as unfair drainage of their resources. Conflicting interests between regions could generate adverse effects on the political unity of the nation. This is not to suggest that China is already on the edge of national disintegration. Nevertheless, Chinese leaders should never treat this danger lightly. As long as building a 'socialist' market economy is still their professed goal, and 'stability' (wending) and 'development' (fazhan) are still their top priorities, they should handle the issue of inequality with great caution. Some degree of inequality may be inevitable in any society. The government may be able to persuade people that some regions must get rich first so that every region will eventually get rich. But, if it fails to distribute the gains from reforms more or less evenly and the gap between those who flourish and those who stagnate becomes unacceptably large, then people's patience with growing inequality could wear thin and their frustration will sooner or later reach a crisis point. Experience elsewhere suggests that few political regimes can maintain political stability under conditions of severe economic disparity. For this reason, China now has to make the reduction of regional disparities a top national priority.

To confront growing regional disparities, the Chinese government first has to change its skewed regional policies. Unless its development bias towards coastal provinces is removed, interior provinces will have no chance to catch up with coastal provinces that enjoy tremendous natural and human capital advantages to begin with. Meanwhile, for the Chinese Government to be able to effect equalisation across regions, it also has to rebuild its extractive capacity by overhauling the country's fiscal system. Only when the central government is able to extract large surpluses from rich provinces and make large transfers to poor provinces can the effects of the initial unequal distribution of resources be offset.

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UNEVEN ECONOMIC DEVELOPMENT

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