



The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.



The United Nations
University

WIDER

World Institute for Development Economics Research

Research in Progress 20

**REGIONAL DEVELOPMENT AND GOVERNMENT POLICY
IN CHINA'S TRANSITIONAL ECONOMY**

Jane Golley

April 1999

UNU World Institute for
Development Economics Research
(UNU/WIDER)

Research in Progress 20

Regional Development and Government Policy In China's Transitional Economy

Jane Golley

April 1999

This study has been prepared within the UNU/WIDER Internship Programme and the 1998-99 research programme area dealing with transition.

Jane Golley is affiliated with the University of Oxford.

Research in Progress (RIP) is a UNU/WIDER in-house publication series, which is distributed free-of-charge in limited numbers. The studies issued in the series are complete drafts prepared as part of the Institute's research programme and are circulated among project networkers and other scholars to elicit feedback and comments. In several cases, the studies will be published at a later stage in a revised form in the Institute's official publication series or in edited volumes published by academic publishers. RIP studies should not be quoted without the author's permission.

UNU World Institute for Development Economics Research (UNU/WIDER)

A research and training centre of the United Nations University

The Board of UNU/WIDER

Nora Lustig

Harris Mutio Mule

Sylvia Ostry

Jukka Pekkarinen, Vice Chairperson

George Vassiliou, Chairperson

Ruben Yevstigneyev

Masaru Yoshitomi

Ex Officio

Hans J. A. van Ginkel, Rector of UNU

Giovanni Andrea Cornia, Director of UNU/WIDER

UNU World Institute for Development Economics Research (UNU/WIDER) was established by the United Nations University as its first research and training centre and started work in Helsinki, Finland in 1985. The purpose of the Institute is to undertake applied research and policy analysis on structural changes affecting the developing and transitional economies, to provide a forum for the advocacy of policies leading to robust, equitable and environmentally sustainable growth, and to promote capacity strengthening and training in the field of economic and social policy making. Its work is carried out by staff researchers and visiting scholars in Helsinki and through networks of collaborating scholars and institutions around the world.

UNU World Institute for Development Economics Research (UNU/WIDER)

Katajanokanlaituri 6 B

00160 Helsinki, Finland

Copyright © UNU/WIDER 1999

The views expressed in this publication are those of the author(s). Publication does not imply endorsement by the Institute or the United Nations University of any of the views expressed.

ISSN 1455-3090

ISBN 952-9520-88-3

CONTENTS

List of Tables and Figures

Abstract

1. Introduction	1
PART I	3
2. The Basic Facts	3
<i>2.1 Provincial Shares of GDP and its Components</i>	3
<i>2.2 Provincial Growth Rates and Per Capita Incomes</i>	5
<i>2.3 Provincial Industry Structure</i>	9
<i>2.4 So Why the Core?</i>	11
3. Historical Background	12
4. Economic Reforms and the Regional Development Strategy	15
5. Central-Local Government Relations and Preferential Policies	17
<i>5.1 Introduction</i>	17
<i>5.2 The Role of Local Governments</i>	18
<i>5.3 Fiscal Decentralization</i>	19
<i>5.4 Preferential Policies: Some Examples</i>	23
6. Part I: Conclusions	25
PART II	25
7. Introduction	25
8. Theory and Reality	26
<i>8.1 Economies of Scale and Industrial Agglomeration</i>	26
<i>8.2 Three Simple Models of Economic Geography</i>	27
<i>8.3 Relevance to China</i>	28
9. Regional Development Policy in the 1990s	31
<i>9.1 Introduction</i>	31
<i>9.2 Fiscal-, Credit- and Investment-Based Measures</i>	32
<i>9.3 Foreign Trade and Investment</i>	33
<i>9.4 Cooperative Measures</i>	33
<i>9.5 Rural Enterprise Development</i>	34
10. The Role of Local Governments	35
11. Some Broad Observations and Conclusions	36
Bibliography	39

LIST OF TABLES AND FIGURES

Table 2.1	Percentage Point Changes in GDP and Secondary Industry Shares	4
Table 2.2	Increases in the Core's Share of Major Industrial Products	6
Table 2.3	Top 6 Producers of Industrial Output by Sector	7
Table 2.4	Per Capita GDP	8
Table 2.5	Composition of GVIO: Ownership (1996)	10
Table 2.6	Composition of GVIO: Light/Heavy and Enterprise Size (1996)	10
Table 2.7	Foreign Trade (1996)	11
Table 5.1	Central and Local Budgetary and Extra-Budgetary Revenue and Expenditure	20
Table 5.2	Per Capita Revenues and Expenditures of Local Governments	22
Figure 1	Regional Shares of GVIO	5
Figure 2	Index of Per Capita GDP	9
Figure 3	Distribution of Total Domestic Investment in Capital Construction	14

ABSTRACT

This paper examines the causes and consequences of the increase in regional disparities in China during its economic transition towards a 'socialist market economy'. Part 1 seeks to explain why the 'Core' provinces in southeast China have consistently outperformed the remainder of the country, particularly in the 1990s. While it is recognized that numerous historical and geographical factors have played a role, the basic argument is that government policies concerning the nature and pattern of economic reform have been paramount in causing the observed divergence in industrial development across provinces. In contrast to the Maoist era, the regional development strategy adopted in the 1980s clearly favoured coastal provinces. In combination with preferential policies, this is shown to have benefited the Core provinces above all others. Amidst an enhanced role for market forces, fiscal decentralization has compounded disparities, creating virtuous circles in successful provinces and vicious circles elsewhere. In essence, government-induced cumulative processes abound in China's regional development story.

For social, political and economic reasons, the central government's regional policy focus has shifted in the 1990s to the less developed provinces in central and western China. Part 2 of this paper examines the potential effectiveness of the latest set of policies, which includes fiscal-, credit-, and investment-based incentives, policies to attract foreign trade and investment, and various co-operative measures. The analysis draws on three simple models of economic geography which capture the role of scale economies, transport costs, wage differentials, inter-industry linkages and factor mobility in industrial development. In light of the central government's diminished power to directly control economic forces and the cumulative processes it must now work against, the task it faces is certainly a difficult one. It is argued, however, that the government has played a decisive role in determining the spatial structure of industry and consequent patterns of regional development throughout China's reform era and it will almost certainly continue to do so in the future. To succeed in its current endeavour, understanding the processes underpinning regional disparities is a vital step in the right direction.

Regional Development and Government Policy in China's Transitional Economy

1. Introduction

The link between a region's industrial structure and level of economic development has long been recognized by economic geographers and regional development economists alike.¹ Both schools of thought rely on the same basic insight that the division of labour depends upon the extent of the market, and the extent of the market depends on the division of labour. This circular relationship between the market and labour supply can explain why some regions may be richer than others and experience a process of self-reinforcing development and industrial agglomeration.

More recent advances in modelling imperfectly competitive markets have enabled economists, such as Paul Krugman, to formalize and clarify the basic ideas, and there has been a resurgence of interest in the field of 'new economic geography'.² This literature concludes that both regional development and the geographical distribution of industry are disequilibrium, or cumulative, processes. This is contrary to the predictions made in the standard economic paradigm of perfect competition and constant returns to scale, and gives 'a decisive role to historical accident'³ in determining the spatial structure of industry and consequent patterns of regional development.

While this may well be true, in the case of China deliberate decisions taken by the government have had an enormous impact on the regional dimension of industrial development. In the Maoist era deliberate efforts were made to redress the 'irrational' distribution of industry in which output capacity was concentrated in northeast China and a few coastal areas. While the efforts had high efficiency costs, there is no doubt that the policy goal of relocating industry to provinces in China's interior was partially successful. In 1953 interior provinces accounted for 31 per cent of national gross value of industrial output (GVIO); by 1983 this share had increased to 41 per cent. Mandatory planning and government ownership of nearly all the means of production clearly played a decisive role in regional economic developments during this period.

Since 1978 a gradual process of economic reform has aimed to transform China into a 'socialist market economy,' with a decisive shift away from central planning. The number of goods subject to mandatory planning and price controls has been reduced and the decision-making process has been progressively decentralized. Various policies have also been implemented to promote the allocation of resources in line with regional comparative advantage. While this has reduced the central government's ability to directly control economic forces, policy actions have again played a decisive role. The main beneficiaries of numerous government policies throughout the reform period have been Shandong, Jiangsu,

¹ In the economic geography literature, see for examples Christaller (1933), Losch (1940) and Harris (1954). In the regional development literature, seminal works include Myrdal (1957), Nurske (1958), Hirshman (1958) and Lewis (1954). Krugman (1995) provides an excellent overview of both fields.

² See for examples Krugman (1991, 1995), Krugman and Venables (1995), Puga and Venables (1996), Hanson (1994) and Brühlhart and Torstensson (1996).

³ Krugman (1991: 25).

Zhejiang, Fujian, Guangdong, and more recently Shanghai. Interestingly, and surely not coincidentally, these provinces increased their combined share of GVIO from 26 per cent in 1980 to 44 per cent in 1995. Cumulative processes in China's economy have given a decisive role to government policy, alongside historical accidents, in determining the spatial structure of industry and consequent patterns of regional development. In essence, the role of the government is paramount in China's regional development story.

There is now a vast literature concerning regional disparities in China during the reform period.⁴ Most analysis divides China into one of two classifications. The first one distinguishes the Coast from the Interior; the second maintains this distinction but further divides the interior provinces into two regions, the Centre and the West. A close examination of provincial level data reveals some important insights from an alternative regional breakdown. The most important aspect of this is the separation of the 'Core' provinces in southeast China from the remaining coastal provinces in the northeast. For a number of reasons the Core region has developed more rapidly than the rest of China during the period since economic reforms began in 1978. As a result, the Core's share in national GDP has risen markedly and concurrent increases in per capita income have made the region China's wealthiest. The main source of regional divergence has been the extraordinary growth and development of industry, particularly manufacturing, in the Core.

The pattern of regional development that has emerged through China's economic transition is problematic for the government, which has identified narrowing the interregional development gap in China as one of the major issues affecting reform and development in the 1990s. At the same time, however, the government continually emphasizes the importance of progressing towards a fundamental change in the economic structure, from a planned economy to a socialist market economy. This has weakened the central government's traditional methods of affecting the distribution of wealth. An understanding of the forces contributing to uneven growth and development in the Chinese economy is essential if policymakers seriously hope to address the problem. The central government now wants to ameliorate the cumulative processes which they have hitherto compounded. Does it stand a chance?

This paper comprises two parts. Part I seeks to characterize the historical, political and economic factors that have contributed to divergent levels of economic development across regions. In Section 2 the basic facts on regional disparities in China are presented, highlighting the formation of a manufacturing core in the southeast and the consequent divergence in GDP growth rates and per capita incomes. Several differences in provincial industry structure justify the focus of this analysis in terms of a 'Core-Periphery' breakdown. Section 3 sets the stage with a brief historical background of industrial development prior to the reform period. Section 4 turns to China's economic reforms and the central government's regional development strategy during the last two decades, identifying numerous factors which appear to have compounded history in favouring the Core. Central-local government relations are analysed in Section 5, revealing the role of government at all levels and describing certain mechanisms, including fiscal decentralization, that have contributed to uneven industrial development across provinces. Section 6 concludes Part I.

⁴ See, for examples, Kato (1992), Yang (1990, 1997), Yao (1997), Jian *et al.* (1996) and Chen and Fleisher (1996).

Part II turns to an analysis of policy issues, introduced in Section 7. Section 8 attempts to combine theory and reality in explaining some of the broader aspects of the industrialization process in the Core. External, or agglomeration, economies can explain the benefits of locating industry in better developed regions. Rising costs, however, ultimately cause firms to consider relocating elsewhere. The decision to relocate is dependent on numerous factors including wage levels, transport costs, factor mobility and the degree of integration among provinces. Policymakers clearly need to take such factors into account when addressing the regional problem. Three simple models of economic geography provide a theoretical basis for interpreting and understanding China's regional development story. The relevance of the models to China is incorporated generally into the discussion in Section 8 and more specifically into an analysis of the central government's current set of regional development policies in Section 9. Section 10 considers the role of local governments. Section 11 draws some broad observations and concludes.

PART I

2. The Basic Facts

2.1 Provincial Shares of GDP and its Components

In 1995 the 'Core' provinces of Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, and Guangdong accounted for 26.3 per cent of China's total population, with a combined area approximately 7 per cent of China's total.⁵ Their combined share in China's total GDP was 41.2 per cent. This represented an 8.5 percentage point increase over their combined share in 1980. The most dramatic increase was between 1990 and 1995, during which time the Core's share of GDP rose by 5.3 percentage points. Of course there were variations across provinces within the Core, but even Shanghai, which experienced a declining share of total GDP until 1990, increased its share between 1990 and 1995 (Table 2.1).

The increase in the Core's share of GDP has stemmed mainly from increases in secondary and tertiary industries, although most of the provinces have also increased their share of primary industry, or agriculture. The increase in the Core's share of secondary industry is quite remarkable: a combined increase of 9.6 percentage points between 1980 and 1995. Excluding Shanghai, the combined increase was 15 percentage points (Table 2.1). Gains in tertiary industry are equally impressive, with Core provinces producing 42 per cent of the total in 1995, compared with 32 per cent in 1980.⁶ A provincial level ranking reveals that the Core* provinces, Jiangsu, Zhejiang, Fujian, Shandong, and Guangdong, have been the five top provinces in terms of gains in provincial shares of GDP, secondary and tertiary industries over the reform period.⁷ Figure 1 illustrates clearly the increase in the Core's share of total gross value of industrial output (GVIO).

⁵ All figures in this section have been calculated from State Statistical Bureau (henceforth, SSB) (1996) unless otherwise noted.

⁶ The major focus of this paper is secondary industry, particularly manufacturing. Developments in the service sector are clearly an important aspect of development but remain beyond the scope of this paper. Secondary industry is defined by the Chinese State Statistical Bureau to include industry (mining and quarrying, manufacturing, water supply, electricity generation and supply, steam, hot water, gas) and construction (SSB (1997: 63)).

⁷ Shanghai is an exception to many of the observations relevant to the other Core provinces. For this reason, all calculations have also been made for the Core* which excludes Shanghai.

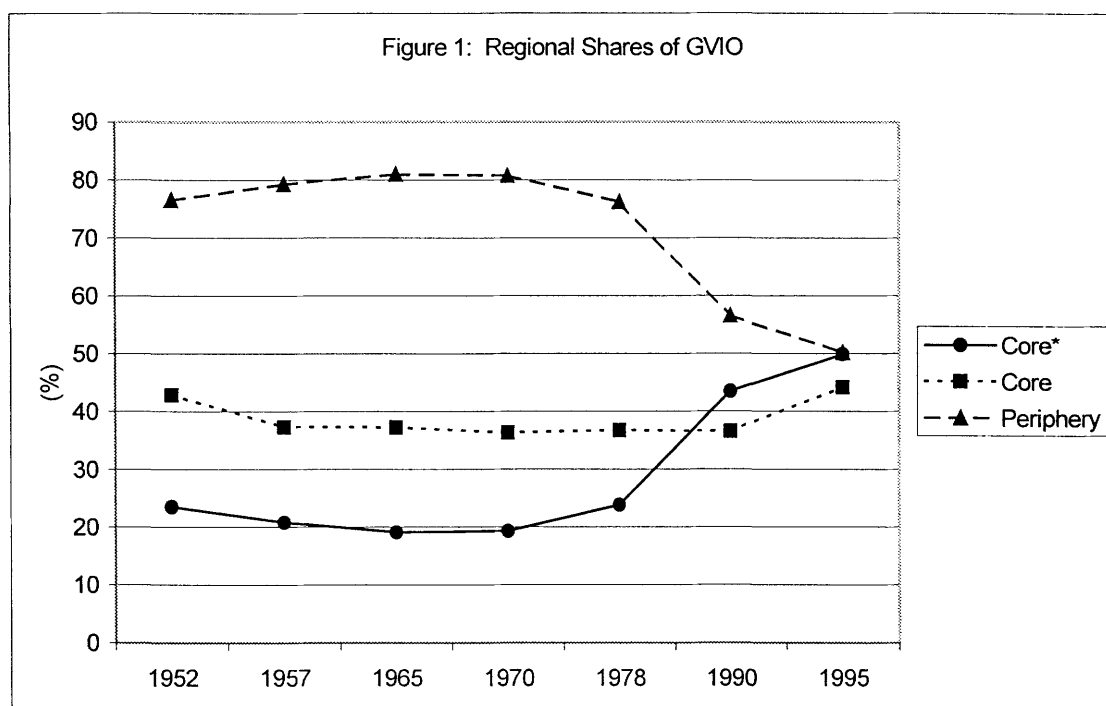
TABLE 2.1
PERCENTAGE POINT CHANGES IN GDP AND SECONDARY INDUSTRY SHARES

Region	GDP				Secondary Industry			
	1980-95	1980-85	1985-90	1990-95	1980-95	1980-85	1985-90	1990-95
Beijing	-0.74	-0.18	-0.25	-0.31	-2.06	-0.50	-0.43	-1.14
Tianjin	-0.75	-0.32	-0.34	-0.10	-1.42	-0.42	-0.52	-0.48
Heibei	-0.03	-0.39	0.29	0.07	0.10	-0.19	0.44	-0.15
Shanxi	-0.57	0.07	-0.20	-0.44	-0.86	0.12	-0.27	-0.72
Inner Mongolia	-0.37	0.34	-0.16	-0.56	-0.50	-0.04	-0.09	-0.36
Liaoning	-1.53	-0.38	-0.22	-0.93	-3.56	-0.51	-1.16	-1.89
Jilin	-0.28	0.08	0.00	-0.36	-0.59	0.06	-0.06	-0.60
Heilongjiang	-1.52	-0.91	-0.22	-0.40	-2.03	-0.81	-0.41	-0.82
Shanghai	-2.81	-1.68	-1.29	0.16	-5.46	-2.55	-1.85	-1.06
Jiangsu	1.69	0.29	0.17	1.24	2.46	0.90	0.52	1.03
Zhejiang	2.04	0.87	-0.06	1.23	2.97	1.16	0.34	1.47
Anhui	0.28	0.64	-0.25	-0.10	1.20	0.68	0.33	0.20
Fujian	1.78	0.35	0.53	0.90	1.75	0.20	0.46	1.10
Jiangxi	-0.43	-0.12	-0.07	-0.24	-0.19	0.04	-0.16	-0.07
Shandong	2.06	1.25	0.35	0.46	2.16	0.71	0.95	0.50
Henan	0.01	0.03	-0.14	0.12	0.97	-0.03	0.07	0.93
Hubei	-0.38	0.06	-0.10	-0.34	0.32	0.21	-0.28	0.40
Hunan	-0.54	-0.30	0.00	-0.24	-0.60	-0.44	0.08	-0.23
Guangdong	3.77	0.83	1.61	1.33	5.72	1.06	2.00	2.66
Guangxi	0.58	-0.11	0.35	0.34	0.84	-0.03	0.17	0.70
Hainan	0.19	0.06	0.06	0.07	0.13	0.07	0.03	0.03
Sichuan	-1.18	-0.29	-0.56	-0.32	-0.01	0.55	-0.48	-0.08
Guizhou	-0.27	0.07	-0.02	-0.32	-0.22	0.16	-0.04	-0.34
Yunnan	0.18	0.00	0.55	-0.36	0.45	0.10	0.42	-0.07
Tibet	-0.10	0.01	-0.05	-0.05	-0.05	-0.02	-0.03	0.00
Shaanxi	-0.42	-0.06	-0.06	-0.30	-0.66	-0.16	0.04	-0.54
Gansu	-0.72	-0.25	-0.11	-0.36	-0.85	-0.33	-0.19	-0.32
Qinghai	-0.12	-0.02	0.00	-0.09	-0.11	-0.02	0.02	-0.11
Ningxia	-0.07	-0.01	0.00	-0.06	-0.05	-0.03	0.03	-0.06
Xinjiang	0.24	0.09	0.19	-0.04	0.15	0.04	0.07	0.03
Core	8.53	1.90	1.31	5.33	9.59	1.49	2.42	5.69
Core*	11.35	3.58	2.60	5.17	15.05	4.03	4.27	6.75

Source: SSB (1996).

Table 2.2 provides more detailed evidence of the increase in the Core's share of a large number of China's major industrial products, ranging from cloth and yarn to cement and steel. Dapeng Hu (1998), in an assessment of industrial agglomeration in the coast, calculates the share of the top four provinces in 1985 and 1994 in China's main manufacturing export sectors: textiles, garments, chemicals, machinery, electric equipment, and electronics and telecommunications. The share of the top four provinces in total output has risen in all six sectors over time. In 1994 only two of the sectors (machinery, and electronics and telecommunications) had non-Core provinces in the top four, and in both cases, these provinces (Liaoning and Beijing respectively) ranked fourth. Table 2.3 presents the top six provinces for industrial output at the three-digit level in 1996.⁸ The dominance of the Core provinces in nearly all industries is quite remarkable.

⁸ SSB (1997).



2.2 Provincial Growth Rates and Per Capita Incomes

Between 1952 and 1978 the average annual rate of GDP growth (at current prices) in China was 7 per cent.⁹ The Core average was 6.9 per cent compared with 7 per cent for the Periphery.¹⁰ Between 1978 and 1995 GDP grew at an average rate of 17.5 per cent per year. The Core average was 20 per cent (Core* 21.2 per cent) while the rest of China averaged 17 per cent. This represents a significant difference over time. For example, Guangdong and Hebei had almost identical levels of GDP in 1978. By 1995, with average growth rates of 21.9 per cent and 17.5 per cent respectively, Guangdong's GDP was close to double Hebei's. The divergence in growth rates has been particularly rapid in the 1990s, with the differential between Core and Provincial rates peaking at 11 percentage points in 1992-93. This coincided with Deng Xiaoping's now famous trip to southeastern China, in which he encouraged rapid growth in the region as part of his overall strategy to enable some people and areas to become rich first before attaining the goal of common prosperity.¹¹

⁹ SSB (1996b). Growth rates are usually calculated at constant prices. Lack of price indices makes this impossible for the pre-reform period, so for completeness I have used current prices. For comparative purposes across provinces, this does not pose any problems. However, for the record, measured at constant prices, China's GDP grew at an average rate of 8.8 per cent between 1980 and 1995. The Core averaged 10.9 per cent (12.1 per cent excluding Shanghai), while the rest of China averaged 8.2 per cent. Differential rates of growth occurred throughout the reform period, but the most significant difference again is in the first half of the 1990s, when Core provinces averaged GDP growth of 15.8 per cent (16.6 per cent excluding Shanghai) compared with 9.5 per cent for the rest of China. The story is essentially the same as for current prices.

¹⁰ The rest of China will be referred to as the Periphery throughout this paper. This is more for convenience of reference rather than to imply that the rest of China is a homogeneous region with no industrial development of its own. This is clearly not the case. This issue is addressed in more detail in Section 2.4.

¹¹ Yang (1997).

TABLE 2.2
INCREASES IN THE CORE'S SHARE OF MAJOR INDUSTRIAL PRODUCTS

Region	Industrial Product																	
	<i>Cloth</i>		<i>Yarn</i>		Machine-made paper and paperboards		<i>Synthetic Detergents</i>		Sugar		<i>Alcoholic Beverages</i>		Household Refridgerators		<i>Household Washing Machines</i>		<i>Television Sets</i>	
	Share of Region in Total Production																	
	1981-85	1991-95	1981-85	1991-95	1981-85	1991-95	1981-85	1991-95	1981-85	1991-95	1981-85	1991-95	1981-85	1991-95	1981-85	1991-95	1981-85	1991-95
Core	38.6	46.1	31.0	29.1	29.5	36.3	29.9	39.8	44.4	30.7	30.1	37.0	61.3	56.8	38.5	59.5	54.6	66.7
Core*	27.8	40.5	19.4	22.6	24.4	34.2	18.4	31.1	44.4	30.7	30.1	37.0	49.8	42.1	28.2	44.8	31.8	52.2
Shanghai	10.9	5.6	11.7	6.5	5.1	2.1	11.5	8.7	n/a	n/a	n/a	n/a	11.5	14.8	10.3	14.7	22.8	14.5
Jiangsu	13.8	16.0	12.8	13.4	5.7	5.3	7.4	10.7	1.4	0.0	7.9	6.4	10.7	2.9	6.3	6.2	15.3	17.0
Zhejiang	4.5	9.1	3.8	4.8	5.1	6.8	1.8	1.7	1.0	0.2	12.2	9.7	15.9	7.0	12.0	6.9	5.0	9.8
Fujian	1.0	1.5	1.0	1.3	4.2	3.9	0.0	0.4	10.2	5.8	0.4	3.7	2.6	0.1	n/a	n/a	4.0	5.0
Shandong	6.9	10.1	n/a	n/a	3.7	8.8	4.6	7.6	0.2	0.1	5.5	11.7	0.9	8.5	2.1	7.9	2.1	2.2
Guangdong	1.7	3.8	1.8	3.0	5.7	9.5	4.6	10.7	31.6	24.6	4.2	5.5	19.7	23.6	7.8	23.8	5.4	18.2

	Industrial Product																	
	<i>Crude Oil</i>		<i>Coal</i>		<i>Electricity</i>		<i>Steel</i>		<i>Rolled-steel Final Products</i>		<i>Cement</i>		Sulfuric Acid		<i>Soda Ash</i>		<i>Chemical Pesticides</i>	
	Share of Region in Total Production																	
	1981-85	1991-95	1981-85	1991-95	1981-85	1991-95	1981-85	1991-95	1981-85	1991-95	1981-85	1991-95	1981-85	1991-95	1981-85	1991-95	1981-85	1991-95
Core*	11.0	20.9	8.3	8.8	24.6	30.5	19.4	25.5	23.1	28.7	28.0	38.5	33.2	29.5	37.0	39.1	26.2	23.0
Core	11.0	20.9	8.3	8.8	18.1	26.2	6.4	10.8	9.4	15.1	26.1	37.5	28.5	27.1	25.1	30.4	24.9	21.7
Shanghai	n/a	n/a	n/a	n/a	6.5	4.3	13.0	14.7	13.7	13.6	1.8	1.0	4.6	2.4	11.9	8.7	5.1	3.2
Jiangsu	0.4	0.7	2.6	2.1	5.5	6.6	1.9	3.5	3.5	6.8	8.0	7.6	12.8	9.8	10.2	10.0	14.1	22.0
Zhejiang	n/a	n/a	0.2	0.1	3.1	3.7	1.1	1.5	1.8	2.1	4.8	6.5	3.3	2.7	5.0	4.9	10.9	11.2
Fujian	n/a	n/a	0.7	0.8	1.8	2.4	0.6	0.7	0.7	1.0	1.9	2.7	0.3	2.1	2.8	2.5	2.5	2.7
Shandong	10.5	17.5	3.6	4.9	3.7	6.2	1.5	3.3	1.6	2.6	4.4	9.7	3.7	5.2	3.7	9.7	4.0	6.2
Guangdong	0.1	2.7	1.1	0.8	4.0	7.2	1.3	1.9	1.9	2.6	6.9	11.1	8.3	7.2	3.5	3.3	4.6	3.6

Source: SSB (1996).

TABLE 2.3
TOP 6 PRODUCERS OF INDUSTRIAL OUTPUT BY SECTOR

Industry	% China's Total GVIO 1995	Top 6 Producers	% Produced by Top 6
Textiles	12.2	<i>Jiangsu, Zhejiang, Shandong, Guangdong, Shanghai, Hubei</i>	69
Smelting and Pressing Ferrous Metals	10.2	<i>Shanghai, Liaoning, Jiangsu, Hebei, Sichuan, Hubei</i>	58
Transportation Equipment	7.8	<i>Shanghai, Jiangsu, Hubei, Jilin, Guangdong, Shandong</i>	53
Chemical materials and products	7.8	<i>Jiangsu, Shandong, Guangdong, Shanghai, Liaoning, Sichuan</i>	52
Food Processing	6.2	<i>Shandong, Guangdong, Jiangsu, Sichuan, Anhui, Henan</i>	49
Machine Building	5.9	<i>Jiangsu, Shandong, Liaoning, Shanghai, Zhejiang, Sichuan</i>	59
Electric Equipment and Machinery	5.7	<i>Guangdong, Jiangsu, Shanghai, Zhejiang, Shandong, Liaoning</i>	68
Electronic and Telecomm. Equipment	4.9	<i>Guangdong, Jiangsu, Shanghai, Beijing, Fujian, Zhejiang</i>	70
Petroleum	4.6	<i>Liaoning, Shandong, Guangdong, Heilongjiang, Beijing, Jiangsu</i>	59
Metal Products	4.2	<i>Jiangsu, Guangdong, Shandong, Shanghai, Zhejiang, Liaoning</i>	61
Clothing	3.5	<i>Guangdong, Jiangsu, Zhejiang, Shanghai, Shandong, Fujian</i>	72
Smelt and Pressing Non Ferrous Metals	3.0	<i>Jiangsu, Guansu, Liaoning, Shanghai, Zhejiang, Guangdong</i>	46
Beverages	2.5	<i>Shandong, Guangdong, Sichuan, Jiangsu, Zhejiang, Anhui</i>	52
Tobacco	2.4	<i>Yunnan, Hunan, Henan, Shandong, Hubei, Guangdong</i>	62
Plastic	2.3	<i>Guangdong, Jiangsu, Zhejiang, Shandong, Fujian, Sichuan</i>	68
Non Metal mineral products	2.2	<i>Shandong, Guangdong, Jiangsu, Zhejiang, Liaoning, Henan</i>	53
Medical and Pharmaceutical products	2.2	<i>Guangdong, Jiangsu, Shanghai, Shandong, Liaoning, Zhejiang</i>	51
Leathers, furs and manufactures	2.1	<i>Guangdong, Zhejiang, Jiangsu, Shandong, Fujian, Shanghai</i>	71
Food Manufacturing	2.0	<i>Guangdong, Shandong, Jiangsu, Zhejiang, Henan, Shanghai</i>	55
Paper making and manufactured goods	1.9	<i>Guangdong, Shandong, Jiangsu, Zhejiang, Fujian, Henan</i>	51
Chemical Fibres	1.6	<i>Jiangsu, Shanghai, Guangdong, Zhejiang, Shandong, Sichuan</i>	75
Rubber	1.4	<i>Shandong, Shanghai, Jiangsu, Guangdong, Zhejiang, Liaoning</i>	59
Instruments, metres and measuring equipment	1.0	<i>Jiangsu, Guangdong, Shanghai, Zhejiang, Liaoning, Shandong</i>	70
Printing and record medium manufacturing	1.0	<i>Guangdong, Jiangsu, Shandong, Beijing, Zhejiang, Shanghai</i>	51
Timber, Bamboo, Cane, Palm and Straw	0.9	<i>Guangdong, Fujian, Jiangsu, Heilongjiang, Shandong, Jiangxi</i>	51
Furniture	0.5	<i>Guangdong, Shandong, Jiangsu, Beijing, Xinjiang, Hubei</i>	59

Source: SSB (1995).

Per capita GDP reveals similar trends. In 1995 Chinese per capita GDP was 5,318 yuan (US\$637). The Core average was 9,169 yuan (US\$1,098) while the Periphery averaged 4,355 yuan (US\$522). Between 1978 and 1995 Core per capita GDP increased at an average rate of 18.5 per cent compared with the Periphery's average of 15.4 per cent. Again, this generates a substantial difference over time. In 1978 the Core* had an average per capita GDP of 343 yuan compared with an average of 419 yuan for the Periphery. By 1995 per capita GDP had risen to 7,214 yuan and 4,355 yuan in the two regions respectively.

Growth has been rapid across China, but differential growth rates have resulted in diverging incomes across provinces. Between 1978 and 1995 the coefficient of variation on per capita GDP fell from 0.99 to 0.73 and further to 0.61 in 1990. However, it has increased steadily in the 1990s to reach 0.68 in 1995. Excluding the centrally-administered municipalities (CAMs), Beijing, Tianjin and Shanghai, the coefficient of variation fell from 0.32 to 0.28 between 1978 and 1985, but has increased steadily since then, reaching 0.41 in 1995 (Table 2.4).¹² Whichever way one looks at it, provincial income disparities have been increasing throughout the 1990s. Nowhere is this clearer than in a comparison between the rapidly growing Core provinces, particularly the Core* provinces and the rest of the country. Figure 2 illustrates an index of per capita GDP where the China average is equal to 100. Since 1978 Core* provinces have consistently increased their GDP relative to the average for the Chinese economy. Shanghai dampened the overall effect for the Core until 1990 but since then has joined its southern neighbours in experiencing above average rates of growth.

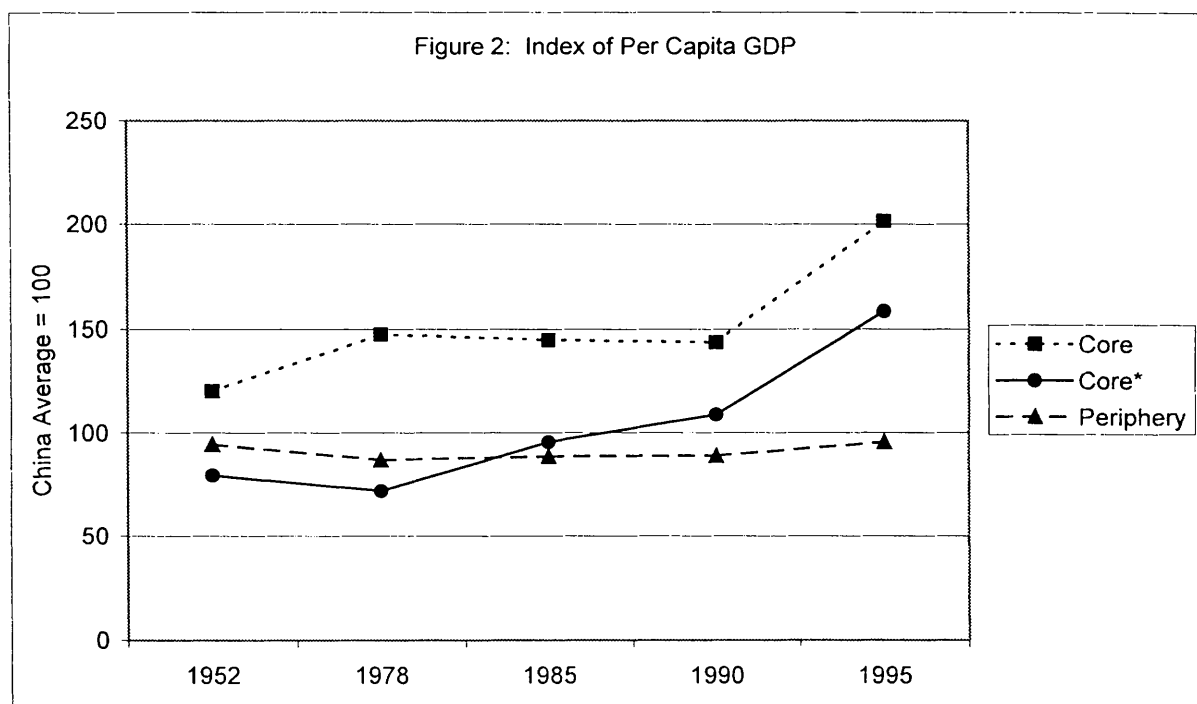
¹² The results are strongly influenced by the CAMs' particularly high values.

TABLE 2.4
PER CAPITA GDP

Region	Per capita GDP by Region (yuan)								
	1952	1978	1985	1990	1991	1992	1993	1994	1995
Beijing	170	1290	2704	4881	5781	6805	8240	10265	13073
Tianjin	299	1160	2198	3621	3943	4696	6075	8164	10308
Heibei	125	364	719	1465	1727	2040	2682	3439	4444
Shanxi	116	365	826	1493	1604	1926	2352	2819	3569
Inner Mongolia	173	317	809	1478	1642	1906	2382	3013	3013
Liaoning	218	680	1413	2698	3027	3693	5015	6103	6880
Jilin	153	381	868	1746	1878	2246	2868	3703	4414
Heilongjiang	234	564	1062	2028	2316	2684	3320	4427	5465
Shanghai	436	2498	3855	5910	6955	8652	11700	15204	18943
Jiangsu	131	430	1053	2016	2347	3097	4308	5785	7299
Zhejiang	112	331	1063	2122	2540	3187	4431	6149	8074
Anhui	78	244	646	1182	1161	1382	1824	2521	3357
Fujian	102	273	737	1767	2049	2567	3649	5386	6965
Jiangxi	114	276	595	1110	1212	1472	1838	2376	3080
Shandong	91	316	887	1815	2122	2557	3222	4473	5758
Henan	83	232	580	1091	1201	1452	1867	2475	3313
Hubei	90	332	808	1556	1689	1986	2565	3341	4162
Hunan	86	286	626	1228	1357	1613	2053	2701	3470
Guangdong	101	367	979	2395	2823	3575	4938	6380	7973
Guangxi	67	225	471	1066	1211	1490	2031	2772	3543
Hainan	--	--	729	1598	1836	2727	3815	4820	5225
Sichuan	67	253	599	1105	1278	1498	1922	2516	3201
Guizhou	58	175	420	810	896	1034	1255	1553	1853
Yunnan	70	226	486	1224	1377	1622	2020	2490	3044
Tibet	--	--	894	1276	1387	1486	1642	1984	2392
Shaanxi	85	291	604	1241	1410	1591	1926	2344	2843
Gansu	125	348	608	1099	1204	1384	1600	1925	2288
Qinghai	101	428	808	1558	1647	1890	2337	2910	3430
Ningxia	126	370	737	1393	1511	1718	2123	2685	3328
Xinjiang	166	313	820	1799	2101	2477	3019	3953	4819
All China	135	476	987	1859	2108	2548	3301	4289	5318
Core	162	703	1429	2671	3139	3939	5375	7230	9169
Core*	107	343	944	2023	2376	2997	4110	5635	7214
Periphery	129	419	876	1656	1850	2201	2782	3554	4355
Standard Deviation	81	471	722	1125	1338	1651	2205	2868	3613
CoV	0.60	0.99	0.73	0.61	0.63	0.65	0.67	0.67	0.68
CoV*	0.39	0.32	0.28	0.29	0.31	0.34	0.39	0.40	0.41

Note: CoV is the coefficient of variation. CoV* excludes Beijing, Tianjin and Shanghai.
Source: SSB (1996b).

Figure 2: Index of Per Capita GDP



2.3 Provincial Industry Structure

China's industrialization is evidenced by the increasing importance of industry in total GDP. Secondary industry's share rose from 21 per cent in 1952 to 47 per cent in 1995.¹³ Moreover, every province with the exception of Tibet and Hainan now derives more than 30 per cent of its GDP from secondary industry, reflecting deliberate efforts in the Maoist era to achieve a balanced geographical distribution of industry. Nevertheless, there are important structural differences across provinces. A breakdown of GVIO according to ownership is revealing (Table 2.5). The most glaring difference is the state sector's share of industry. In 1996 it contributed 30 per cent to the Core's GVIO compared with 58 per cent for the Periphery. A myriad of problems associated with the inefficiencies and losses recorded by state-owned enterprises (SOEs) have placed SOE reform as perhaps the number one problem facing China's policymakers.¹⁴ A relatively small state sector has clearly favoured the Core's industrial development.

Development of the non-state sector has outstripped the state sector throughout the reform period. The non-state sector comprises collective enterprises (including township and village enterprises (TVEs)), shareholding enterprises, foreign-funded enterprises (FFE), and enterprises funded by overseas Chinese from Hong Kong, Taiwan and Macao (HKTMEs). cursory observation of the data shows substantial differences in the relative importance of the non-state sector across provinces. The Core derived 35 per cent of its GVIO from collective enterprises, compared with 28 per cent for the Periphery; 15 per cent from FFEs compared with 7 per cent; and 15 per cent from HKTMEs compared with 3 per cent. The non-state sector has played a crucial role in China's economic development in the last two decades and provinces with a higher proportion of non-state output have benefited accordingly.

¹³ SSB (1996b). The remaining figures in this section are calculated from SSB (1997).

¹⁴ For details see, for example, Lin *et al.* (1998) and Morris (1995).

TABLE 2.5
COMPOSITION OF GVIO: OWNERSHIP (1996)

Region	Percentage shares				
	SOEs	COEs	SHEs	FFEs	HKTWMes
All China	45	31	5	10	9
Core	30	35	6	15	15
Core*	29	38	5	12	15
Periphery	58	28	5	7	3

Source: SSB (1997).

The composition of GVIO also differs in the relative importance of light and heavy industry, and of large, medium and small enterprises (Table 2.6). The Core derives a larger proportion of its income from light industry: 51 per cent compared with 36 per cent for the Periphery. This difference in regional structure is not in itself a problem if it reflects comparative advantage and natural resource endowments. The problem lies in the fact that large price distortions exist within sectors. Differences in rates of return on fixed assets reflect price distortions. The average return per 100 yuan fixed assets in 1986 was 20 yuan in manufacturing enterprises, 27 yuan in light industry and 17 yuan in heavy industry.¹⁵ Thus, regions possessing more light industry have a distinct advantage in development. Core provinces are also more reliant on small and medium enterprises than other provinces. Arguably, smaller firms are generally more adaptable and have been in a better position to take advantage of the economic reforms. The benefits of having a high share of small-scale light industry is reflected in the contrast between the rapid growth of rural industry (typically small-scale, light industry) and the lagging SOEs (typically large-scale, heavy industry).

TABLE 2.6
COMPOSITION OF GVIO: LIGHT/HEAVY AND ENTERPRISE SIZE (1996)

Region	Percentage Shares				
	Light Industry	Heavy Industry	Large Enterprises	Medium Enterprises	Small Enterprises
All China	38	62	41	14	45
Core	51	49	33	17	50
Core*	52	48	29	17	53
Periphery	36	64	43	13	44

Source: SSB (1997).

China's opening up to the outside world has been one of its most visible reforms to date. China's exports, particularly manufactured exports, have experienced extremely rapid growth. The value of exports rose from \$9.8 billion in 1978 to \$121 billion in 1995. The share of manufactures in total exports rose from 44 per cent to 84 per cent during that time. 73 per cent of China's exports originated in the Core provinces in 1996 (recall that this is with 26 per cent of the population and 41 per cent of total GDP). Guangdong stands out as an exceptional case having an export share of 39 per cent compared with a GDP share of 9.5 per cent. The overall dominance of the coastal region should not be overlooked here: 90 per cent of exports

¹⁵ Kato (1992).

originated in coastal provinces in 1996 (Table 2.7). Clearly, exports are more important for coastal provinces than for China as a whole. An export-oriented development strategy substantially enlarges the size of the market, a well-recognized basic precept for promoting industrial development.

TABLE 2.7
FOREIGN TRADE (1996)

Region	Import and Export Value (1996) (USD 100 million)			Share in Total Exports	Share in Total GDP
	Exports	Imports	Total	(%)	(%)
All China	1511	1388	2899	100	100
Guangdong	593.4	506	1099	39	10
Core	1096	924	2020	73	42
Periphery	415	464	879	27	58

Source: SSB (1997).

Opening up has also led to a substantial increase in foreign investment into China, from a few hundred million dollars annually in the late 1970s and early 1980s, to almost \$4 billion annually in the late 1980s. Since 1991, China has attracted greatly increased amounts of FDI, more than doubling in 1993 and 1994 to reach almost \$34 billion.¹⁶ Once again, Core provinces have been the main beneficiaries. Between 1979 and 1987 the coastal region received 89 per cent of total investment, with the Core accounting for 71 per cent of the total. Foreign capital has contributed significantly to the transfer of advanced technology and managerial practices in many industries, and to the expansion of trade in China, particularly in the Core.¹⁷

2.4 *So Why the Core?*

Most of the literature on Chinese regional development tends to emphasize disparities between coastal and interior provinces. The Coast comprises twelve provinces: Liaoning, Beijing, Tianjin, Hebei, Shandong, Jiangsu, Shanghai, Zhejiang, Fujian, Guangdong, Guangxi and Hainan.¹⁸ The Interior comprises the remaining provinces: Heilongjiang, Jilin, Inner Mongolia, Shanxi, Henan, Anhui, Hubei, Jiangxi, Hunan, Xinjiang, Gansu, Ningxia, Shaanxi, Qinghai, Sichuan, Guizhou, Yunnan and Tibet.¹⁹ So why the proposed breakdown here of a Core and Periphery?

The exclusion of the remaining coastal provinces requires some explanation. Guangxi needs little justification. It remains one of the poorest provinces in China and has experienced a declining share of industrial output since 1978. Starting with a level of per capita income similar to its neighbour Guangdong in 1978, per capita income increased to 3,548 yuan in 1992 in Guangxi compared with 7,973 yuan in Guangdong. It simply has not followed the same path of development as the Core provinces. Hainan has also been excluded from the

¹⁶ Lardy (1995).

¹⁷ Lardy (1992).

¹⁸ Hainan Island was a part of Guangdong province until 1988, when it became a province in its own right.

¹⁹ Beijing, Shanghai and Tianjin are centrally-administered municipalities; Inner Mongolia, Guangxi, Tibet, Ningxia and Xinjiang are autonomous regions; the rest are provinces in the true sense of the word.

Core. While it has made significant progress during the reform period, its performance differs from the other Core provinces in many respects. In particular, development has been largely based on agriculture rather than industry, with only 21 per cent of Hainan's GDP derived from secondary industry in 1996.²⁰

The coastal provinces north of the Core – Hebei, Beijing, Tianjin and Liaoning – have all experienced declining shares of GDP between 1980 and 1995, stemming largely from significant declines in secondary industry shares. Per capita income growth has been below the national average in all four provinces.²¹ In general the provinces in the northeast derive a much larger share of GVIO from the state sector (54 per cent on average compared with the Core's 30 per cent). This is reflected in higher shares of heavy industry and large-scale enterprises. The high share of the state-owned sector in total output is likely to impede, rather than facilitate, future development. Typically, they have also benefited less from foreign investment and are less reliant on exports as a source of growth. This is not to suggest that the provinces in the northeast are insignificant in terms of China's industrial capacities. On the contrary, these provinces perform a vital role in the Chinese economy, particularly in their contribution to heavy industry. Nevertheless, the factors contributing to the Core's rapid growth and development do not, in general, pertain to the provinces in the northeast. It is to these factors that we now turn.

3. Historical Background

Centuries of cumulative change dating at least as far back as the Song dynasty (960-1279) resulted in a shift of China's economic centre towards the coast.²² During the Ming dynasty (1369-1643) fears that regional imbalance would threaten political unity led to attempts by the imperial government to minimize interregional inequality, partly through the tax system. However, the flow of foreign investment that began towards the end of the Qing dynasty (1644-1911) undermined the government's efforts, and led to the emergence of a more industrialized coastal region vis-à-vis the rest of the country.²³ Foreign countries, in particular Britain, Germany, Russia, Japan and the US, invested in China to gain access to its natural resources, cheap labour and huge domestic market. Factories were set up in the cities and ports along the east coast and in other areas where foreign powers were influential. Chinese industrialists, dependant upon imported machinery and funds, tended to concentrate in the coastal cities too.²⁴

In the second half of the nineteenth century industrial enterprises were concentrated mainly in southeast China, partly because of the opening of numerous treaty ports there. In 1842 the Treaty of Nanjing opened the ports of Guangzhou, Fuzhou, Xiamen, Ningbo and Shanghai on the southeast coast to foreign economic activities. The Treaty of Tianjin in 1858 opened a further 10 ports, eight of which (Tainan, Danshui, Chaozhou, Qiongzhou, Hankou, Jiujiang, Nanjing and Zhenjiang) are also in the southeast. Through the first half of this century Japan's

²⁰ See Chongyi and Goodman (1997) for further details on Hainan's reform experience. Its exclusion from the Core is based also on practical reasons. As it only became a province in 1988, data before that time is largely unavailable. Moreover, with the fourth smallest value of provincial GDP, it makes little difference whether it is included or not.

²¹ Although, it should be noted that Beijing and Tianjin had particularly high incomes initially.

²² Yang (1997).

²³ Lardy (1978) gives an interesting account of the long-run factors that facilitated the distributive choices made in China's economic history.

²⁴ Fincher (1990).

influence in China was increasing. Its military and economic aim was the annexation of northeast China (Manchuria) and the reduction of the rest of China to a colony dependant upon, and with the function of supplying raw materials to Japan. The major focus was on the development of heavy industries in northeast China, with concurrent attempts to suppress industrial development in the southeast, in order to minimize competition with Japan's own industries.²⁵

When the Communist government came to power in 1949 they claimed that foreign domination had resulted in an 'irrational' pattern of industrial development in which output capacity was concentrated in the northeast and a few coastal areas. They were determined to achieve a more balanced geographical distribution for a number of reasons. Politically, uneven economic development ran counter to the goal of creating a politically unified and economically integrated nation state. Strategically, it was considered risky to have such a heavy concentration of industry based along the coast, which was easily exposed to foreign military powers. Economically, it was argued that industry should be located closer to supplies of energy and raw material (in the interior) to relieve strains on the undeveloped transport system.²⁶ In Mao's own words: 'Without a doubt the greater part of new industry should be in the interior so that industry can gradually become evenly distributed.'²⁷

The First Five-Year Plan (1953-57) was designed to give China new industrial regions and marked the beginning of a change in the distribution of Chinese industry. Close to two-thirds of the major projects were located in interior provinces. Three-quarters of projects built with Soviet aid, such as the Taiyuan Steel Works in Shanxi and First Autoworks in Jilin, were located into the interior; not a single project was located in any of the major industrial coastal provinces.²⁸ The Plan was strongly Stalinist in its commitment to high rates of growth through rapid capital accumulation, especially in heavy industry. Despite concerns that state investment in interior provinces had been over-emphasized in the First Five-Year Plan,²⁹ investment there actually continued to increase until the early 1970s. During the Second Five-Year Plan (1958-62) the share of total domestic investment in capital construction allocated to interior provinces rose to 56 per cent from 48 per cent in the First Plan.³⁰

Deteriorating Sino-Soviet relations and the US involvement in Vietnam led China's leaders to perceive a greater need for enhancing its national defense capabilities, which in essence meant shifting enterprises to interior provinces. The country was divided into three fronts. The Third Front Policy involved further increases in the share of investments allocated to provinces of the third front (corresponding roughly to the Western region). Sichuan, Hubei, Henan, Guizhou, Gansu and Shaanxi accounted for most new industrial constructions, mainly in heavy industry.³¹ Despite the extreme chaos of the Cultural Revolution (1966-69), third front construction continued into the late 1970s. The divergence in the shares of coast and interior provinces in the allocation of total domestic investment in capital construction peaked between 1966-70 (at the height of Mao's Third Front policy) with interior provinces receiving 65 per cent of the total (Figure 3).

²⁵ This is discussed in detail in Sun (1988).

²⁶ This draws on Lardy (1978) and Yang (1997).

²⁷ Mao Zedong, in Schram, S. (1974).

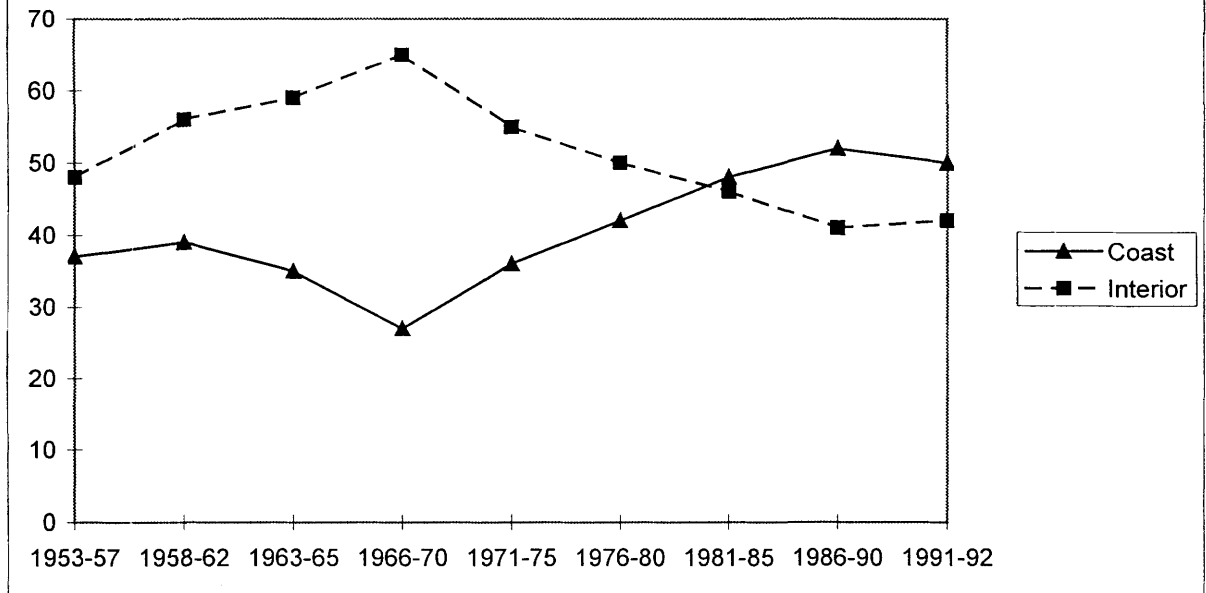
²⁸ Yang (1997).

²⁹ Linge and Forbes (1990).

³⁰ The figures for domestic investment in capital construction are taken from Zhao (1995).

³¹ Yang (1997).

Figure 3: Distribution of Total Domestic Investment in Capital Construction



The Maoist interior-oriented development strategy relied heavily on redistributive measures in an attempt to equalize regional economic development, and on extensive rather than intensive growth.³² While it is widely acknowledged that the strategy was wrought with economic inefficiencies,³³ it is an indisputable fact that balancing the geographical structure of industry was achieved to some extent. In 1953 the interior accounted for 30.6 per cent of national gross value of industrial output (GVIO); by 1983 this share had increased to 40.5 per cent.³⁴ Industrial bases and infrastructure were established in regions that were previously based solely on agriculture. However, the coastal region still produced nearly 60 per cent of the national GVIO in 1983, with only 43 per cent of fixed assets. The higher industrial productivity of coastal provinces stemmed from superior factor endowments, a stronger infrastructure base and better transport facilities. Moreover, the two decentralizations of economic power in 1958 and 1970 had devolved considerable power to local governments, enabling coastal provinces to take advantage of their superior factor endowments. Thus, the

³² Growth is defined as 'extensive' when it stems from an increase in inputs; 'intensive' when it derives from increased efficiency in production.

³³ This is true in both Western and Chinese circles. See for example Yang (1997), Lardy (1978) and Lyons (1987). The following quote best sums it up:

'As the enterprises were required to be scattered over a vast area and built near mountains or in mountain caves, they needed a lot of money but could hardly produce things. Even if some did, the returns were negligible because of their high production costs. Since independent industrial systems were sought after in construction of industrial enterprises in these areas, there was a development in the machine-building industry in disregard of the actual conditions. As a result, the rate of utilization of equipment in the industry was very low, lower than the already unsatisfactory rate for the industry throughout the country. The sudden and big increase of heavy industrial enterprises in the remote areas – some moved from the coastal areas – disrupted old co-ordination systems while new systems were slow in being established. Further problems and inefficiencies were caused by the lack of infrastructure, especially power and transport facilities. Many projects were abandoned before completion when economic and technical difficulties arose, while others depended on state subsidies to keep them in operation.' (Sun and Chen, quoted in Linge and Forbes (1990: 12).

³⁴ Whether or not this was an appropriate goal is a separate issue.

coast continued to outproduce the interior despite the higher proportion of government investment directed to the latter.³⁵

To summarize, the strength of light, textile and processing industries and the weakness of heavy industry in China's southeastern provinces reflects a range of historical factors, from foreign domination in the Qing dynasty, to Japan's suppression of heavy industry, to the Communist government's neglect during most of the Maoist era. Conversely, interior and northeastern provinces would ultimately pay a heavy price for the Japanese and Maoist legacies of development biased towards heavy and defence-related state-owned industries. The result was the emergence of industries in southeast China that were more in line with both regional and national comparative advantage than industries located elsewhere. This shaping of events may well have been a blessing in disguise, or an 'accident of history' for the Core provinces. It certainly paved the way for a new approach to regional development, which emerged as one of the major policy components of China's economic transition beginning in 1978.

4. Economic Reforms and the Regional Development Strategy

Towards the end of the 1970s the policies promoting development in the interior were replaced by ones designed to increase efficiency and productivity based on regional comparative advantage. In stark contrast with the Maoist era, reforms have been intended to expose the economy to the outside world, loosen the administrative control of the government and allow a greater role for market forces. A process of gradualistic, incremental and piecemeal reforms pursued since 1978 has resulted in substantial progress in the transition from a centrally-planned command economy to a decentralized market economy. However, it is important to recognize that this process is far from complete.

In the early stages of reform (1978-83) the major focus was on the agricultural sector, where the introduction of the household production responsibility system gave households autonomy over their production decisions.³⁶ In industry, which was predominantly state-owned, the introduction of a system of profit retention encouraged the fulfillment and overfulfillment of a number of indicators, particularly output and profit. Between 1984 and 1986 the gradual liberalization of foreign trade began, taxation reforms replaced the profit retention scheme, and non-bank financial institutions, such as trust and investment companies, were established. SOE reform allowed enterprises to sell production in excess of mandatory planned output on the market. This could be sold at market determined prices, and effectively created a dual plan-market pricing system which served as a mechanism to deregulate prices over time. Reforms outside the state-owned sector created an increasingly marketized system. The number of goods within the mandatory plan fell, providing leeway for the emergence of a dynamic non-state sector. This, in turn, benefited from productivity improvements in agriculture and the subsequent availability of a vast surplus rural labour force.

During the late 1980s the most significant reform was the introduction of the contracting system in SOEs, aiming to give enterprises greater operational autonomy subject to their fulfillment of contracted production and financial targets. State controls over population movements were relaxed and the range of goods produced outside the mandatory plan increased steadily, providing further impetus to price reforms. Incremental reforms in foreign

³⁵ Yang (1990).

³⁶ The following summary of China's reform process draws on Lin (1995).

trade and other areas continued, although an overheated economy and inflationary pressures saw a greater assertion of central control over investments.

The main priority in the late 1990s phase of reform is the financial sector, with reforms seeking to address the declining share of central tax revenue, to commercialize state banks, and to develop financial markets. SOE reform, as in all phases throughout the reform period, remains a key issue on the reform agenda. It is particularly vital in light of the fact that the proposed structure of a 'socialist market economy' aims to preserve the dominant position of the state sector. A programme of 'corporatization' is aiming to convert the SOEs into Western-type corporate forms with clearly defined capital structures and improved corporate governance. More recently, various forms of privatization have begun to emerge.

Throughout the 1980s the government adopted a series of policies that clearly favoured the development of coastal provinces. The Chinese government appears to have adopted the 'unbalanced growth doctrine' in their view that encouraging the economic growth of selected regions and cities could accelerate national economic development and growth.³⁷ The 'Open Door Policy' was one of the major initiatives underlying the commencement of China's economic reforms. It has involved a number of initiatives designed to reverse the inward-looking policies adopted in the Maoist era. To a large extent, these initiatives have been limited to coastal areas, and more specifically to the Core. In 1979 four Special Economic Zones (SEZs) were established in Shenzhen, Zhuhai, Shantou and Xiamen. In early 1985, the Lower Yangtze Delta, the Pearl River Delta and the Xiamen-Zhangzhou-Quanzhou Triangle were designated as Coastal Economic Development Zones (CEDZs). All of these zones are in Core provinces. In early 1988 Hainan Island (formerly part of Guangdong province) became a province and effectively China's largest SEZ to date. In 1984 fourteen coastal cities, eight of which are in Core provinces, were declared open cities for foreign investment. Since then, numerous areas in the coastal region have been designated 'economic open areas' that enjoy special policy advantages in attracting foreign investment. The SEZs, open cities and CEDZs have been granted special administrative and economic powers, and enjoy tax privileges and other benefits. This has made a significant contribution to the development of export industries and the inflow of foreign investment into the coastal region, particularly in the Core provinces.

The 'Coastal Development Strategy' adopted by the Chinese Communist Party Central Committee and the State Council in March 1988 formalized the central government's policy shift. The strategy has been implemented to a large extent by granting local governments in the coastal provinces more freedom to take advantage of the economic reforms and reduced mandatory planning.³⁸ It has contributed significantly to the rapid growth rates of industrial production, and, especially export production, for the Chinese economy as a whole. However, it has also resulted in differential rates of regional growth, conflicts over access to resources and tendencies towards provincial protectionism. The central government has continually promised that coastal growth and development will trickle down to other regions. However, the continuing divergence in regional income in the 1990s has been met with widespread criticisms and discontent from interior provinces. In response to this the central government seems to have readjusted its focus to interior provinces, as witnessed by a number of measures announced in the Eighth and Ninth Five Year Plans (1991-95 and 1996-2000 respectively). This issue will be addressed in Part II.

³⁷ Yang (1990). This view was propagated by Myrdal (1957) and Hirschman (1958), among others.

³⁸ World Bank (1992).

The changing distribution of domestic investment in capital construction clearly reflects the priority given to coastal development during the reform period (Figure 3). The coastal region's share rose steadily from 27 per cent in 1966-70 to 52 per cent in 1986-90. The policy reversal in the 1990s is also signalled by the declining coastal share in 1991-92, down to 50 per cent.³⁹ Despite this policy shift, Core provinces continue to benefit disproportionately well from the central government's investment decisions, receiving 40 per cent of total investment capital construction in 1996.⁴⁰

In essence, the reforms implemented since the late 1970s have increased the role for market forces and concurrently loosened the central government's direct control over the economy. The reduction of goods produced under mandatory planning, combined with productivity improvements in agriculture and the subsequent surge in rural surplus labour, facilitated rapid growth in the non-state sector. The opening up of the economy (or, more aptly, the opening up of the southeast) has resulted in a boom in exports and foreign investment. The central government's Coastal Development Strategy endorsed unbalanced development and pursued active policies which clearly favoured industrial development in the Core provinces.

In the absence of counterfactual evidence, it is difficult to establish a causal relationship between the reform process, specific government actions and industrial development in the Core provinces. In light of their historical background, superior factor endowments and infrastructure, and proximity and cultural ties with Hong Kong and Taiwan, it is likely that even without favourable policies the Core would have developed more rapidly than other parts of China following the introduction of market reforms. That notwithstanding, from the evidence presented in this section alone, it seems reasonable to assert that government policies in the reform period have compounded historical factors, contributing in a qualifiable, if not quantifiable, way to the Core's industrial success story. Subsequent sections support this claim.

5. Central-Local Government Relations and Preferential Policies

5.1 Introduction

A crucial component of China's reform process has been the decentralization of political and economic decision-making powers to lower levels of government, namely provincial, county, township and village levels. Montinola, Qian and Weingast (1995), in an influential paper, have termed China's current political and economic system 'federalism, Chinese-style.' In essence, the form of decentralization in China provides an important set of limits on the behaviour of government at all levels. It also induces competition among local governments, which provides incentives to foster local economic prosperity. Montinola, Qian and Weingast (1995) identify three main factors underlying the emergence of this system: political decentralization enhancing local powers; the ideological shift from Maoist-Marxist-Leninism to market orientation; and the opening of the economy.

Zheng (1998) identifies an explicit or implicit bargain between the centre and the provinces as a major component of China's institutional pattern, which he calls '*de facto* federalism'.⁴¹ One

³⁹ These numbers are adapted from Zhao (1987).

⁴⁰ SSB (1997).

⁴¹ Zheng identifies two types of decentralization which can occur in the transition to a market economy. The first type, and the one emphasized as vital to the transition process, involves the

part of the bargain is that provinces receive certain institutionalized or ad hoc benefits in return for guarantees by provincial officials that they will behave in accordance with the centre's wishes. These benefits are not uniform across provinces. Decentralization and the consequent role of local governments, combined with non-uniform benefits (which are best exemplified by preferential policies), appear to have led to virtuous circles in some provinces and vicious circles in others. Not surprisingly, Core provinces are among the former.

5.2 *The Role of Local Governments*

The contribution made by the rapid growth and development of TVEs in the last two decades is well recognized. Between 1978 and 1996 the share of TVE output in China's total GVIO rose from 7 per cent to 31 per cent. Over the same period the number of workers employed by TVEs rose from 28 million to 135 million. TVEs fall under the broad category of the 'non-state sector', which can be quite misleading given that they are not privately owned, nor are they some hybrid form of privatization; property rights are firmly in the hands of local governments.⁴² While the introduction of the contract responsibility system decentralized the day to day management of firms, the managers of TVEs are still employees of the state. Oi (1996) has coined the term 'local state corporatism' to describe China's form of state-led growth in the reform period. She describes local officials (referring to town, village and county levels) as equivalent to boards of directors with the enterprises under them a component of a larger corporate whole. They use bureaucratic institutions to facilitate market production, and provide an array of essential services, from raw materials, to information about new products, technology and markets for finished goods.

Nolan and Fureng (1990) describe the involvement of local government in TVE production as 'state-led cooperation,' again emphasizing the intricate link between enterprises and governments at all levels of the bureaucracy. Standing above each enterprise is a multilayered structure to assist enterprises in whose success higher structures has a strong financial stake. Each province has a *xiangzhen* (small township) enterprise bureau, linked to bureaux at the *xian* (county) and *xiang* (township) level. A county level bureau might be responsible for overseeing 100 odd enterprises. Some of its important functions include credit provision, large project approval, and researching market opportunities. Township officials oversee all enterprises, hold exams for worker recruitment, take decisions about setting up new enterprises, raise capital for investment, and determine basic wage levels. They also seek new market opportunities and provide information on skill upgrading. More generally, the state often acts as the agency to ensure that other activities vital to the rural economy but not provided by the market are carried out, such as the provision of irrigation, research institutions, transport networks, information and credit.

Given the rapid growth of TVE output relative to other forms of ownership and the relative importance of TVE to the Core provinces, it is hardly surprising that this sector has contributed to divergent development patterns. Referring to the standard regional classifications provides further insight. With two-thirds of the country's population, interior provinces produced just one third of rural enterprise GVIO in 1993. Yang (1997) argues that 91 per cent of the gap between per capita gross value of output in the coastal and western regions can be accounted for by differences in rural enterprise development. This

decentralization from the central state to the enterprise, granting individual enterprise autonomy. In contrast, the second type, *de facto* federalism, decentralizes property rights to local governments, who then become *de facto* owners of state enterprises.

⁴² This paragraph draws on Oi (1996).

development has been closely related to actions by local governments, and in particular to their ability to provide an environment conducive to industrial development. In turn, this ability is directly linked to their fiscal situation.

5.3 *Fiscal Decentralization*

Fiscal decentralization has been one of the core components of China's reform process. Local revenue has risen from a low of 59 per cent of total revenue in 1984 to 78 per cent in 1993. Major tax reforms in 1994 have restored the balance between central and local revenue, with respective shares of 49 per cent and 51 per cent in 1996. Prior to this, however, revenue was largely in the hands of local governments. The share of local expenditure in total expenditure has also increased steadily throughout the reform period, from 49 per cent of the total in 1979 to 73 per cent in 1996 (Table 5.1). Decentralization has extended well beyond the central-provincial level, to a situation in which all administrative units have moved towards a higher degree of self-financing. This means that disparities in revenue collection translate more directly into disparities in per capita expenditure and provision of public services across all administrative units.⁴³

In the pre-reform system interregional income transfers were an important way of equalizing income and consumption across provinces. These transfers were used to offset the distributional effects of distorted intersectoral and regional industrial compositions. For example, Shanghai collected high revenues from its extensively developed light industry but was then obliged to remit the bulk of these revenues to the central government. This financed transfers to interior provinces, in part to repay them for supplying low-cost raw materials.⁴⁴ Fiscal reforms since 1978 have led to a reduction in interregional income transfers, but have not provided a replacement mechanism for redistribution. In a detailed study of the impact of fiscal decentralization on regional disparities, West and Wong (1995) find that per capita availability of selected key services, especially education and health care, are quite large across provinces. In a comparison between Shandong and Guizhou (a poor province in western China), they find significant disparities in rural illiteracy rates, quality of schools and educational achievements, infant mortality rates, life expectancies and hospital and doctors per capita.⁴⁵ As they point out, the availability of social services is an important indicator, not only because it directly affects the standard of living but also because its trend is relevant to future developments. Regions with higher expenditures in human resources are likely to enjoy higher growth rates in the future.

In the fiscal contract system practiced in various forms throughout the 1980s local governments were contracted to remit a certain amount of locally-collected revenues to the central government. The remaining revenue was available to local governments for the financing of their own social and economic development projects. In addition, the system gave local governments significant discretionary power in the application of tax laws. As long as they met the quotas set by the central government, they could lighten the tax burden to attract investment. Thus, provinces with a budget surplus were able to offer preferential policies at the local level, which served to attract investment, thereby enhancing growth and development. In 1980 the combined budget surplus of the Core stood at around 23 billion

⁴³ West and Wong (1995).

⁴⁴ Wong (1991).

⁴⁵ Not surprisingly, there are also significant disparities within provinces, counties and even some townships.

TABLE 5.1
CENTRAL AND LOCAL BUDGETARY AND EXTRA-BUDGETARY REVENUE AND EXPENDITURE

Year	Government Revenue and Expenditure				Extra-budgetary Revenue and Expenditure				Ratio of Extra-Budgetary Funds to Total Revenue and Expenditure	
	Revenue (% of total)		Expenditure (% of total)		XBR (% of total)		XBE (% of total)		Ratio of XBR to Total Revenue	Ratio of XBE to Total Expenditure
	Central	Local	Central	Local	Central	Local	Central	Local		
1978	16	84	47	53	--	--	--	--	--	--
1979	20	80	51	49	--	--	--	--	--	--
1980	25	75	54	46	--	--	--	--	--	--
1981	26	74	55	45	--	--	--	--	--	--
1982	29	71	53	47	34	66	31	69	0.66	0.60
1983	36	64	54	46	37	63	34	66	0.71	0.62
1984	41	59	53	47	40	60	38	62	0.72	0.66
1985	38	62	40	60	42	58	41	59	0.76	0.69
1986	37	63	38	62	41	59	41	59	0.82	0.72
1987	33	67	37	63	41	59	40	60	0.92	0.81
1988	33	67	34	66	38	62	39	61	1.00	0.86
1989	31	69	31	69	40	60	39	61	1.00	0.89
1990	34	66	33	67	40	60	38	62	0.92	0.88
1991	30	70	32	68	43	57	41	59	1.03	0.91
1992	28	72	31	69	44	56	44	56	1.11	0.98
1993	22	78	28	72	17	83	15	85	0.33	0.28
1994	56	44	30	70	15	85	13	87	0.36	0.30
1995	52	48	29	71	13	87	15	85	0.39	0.34
1996	49	51	27	73	--	--	--	--	--	--

Source: SSB (1996).

yuan while the rest of the country had a combined surplus of 7.4 billion yuan. In per capita terms, this gave the Core on average three times as much to spend on provincial development. By 1985 the Core's budget surplus remained at a similar level while the rest of the country recorded a deficit of 8.5 billion yuan.

A comparison of Core and Periphery per capita revenues and expenditures reveals significant differences. In 1980 Core* per capita revenue averaged 78 yuan compared with Periphery per capita revenue of 70 yuan. In 1995 these had increased to 387 yuan and 211 yuan respectively. In 1980 per capita expenditure averaged 52 yuan in the Core, rising to 532 yuan in 1995. This compares with the Periphery average of 59 yuan in 1980 and 359 yuan in 1995 (Table 5.2).⁴⁶

Sources of revenue and expenditure also show regional variations. In 1996, the value of revenue derived from industrial, commercial and enterprise income taxes was equivalent to 91 per cent of the Core's total revenue, compared with 76 per cent of the Periphery's.⁴⁷ Revenue losses accruing from subsidies to loss-making SOEs were lower on average in Core provinces.⁴⁸ On the expenditure side, the Core as a whole spends proportionally more on capital construction and innovation enterprises, and less on price subsidies, support to agricultural production and pension and relief for social welfare. While there is considerable variation among Core provinces, this evidence supports the claim that local governments in the Core are more able to promote industrial development than those elsewhere.

Extra-budgetary funds (XBFs) have become an increasingly important source of finance over the reform period. Since 1982 the ratio of extra-budgetary revenue (XBR) to total revenue increased steadily, reaching a peak level of 1.11 in 1992.⁴⁹ In 1993 new financial rules and accounting procedures were established and the ratio fell from 1.11 to 0.33.⁵⁰ However, since 1993 the ratio of XBR to total revenue has continued to rise. The story is very similar for extra-budgetary expenditures (XBEs). The share of local government funding in total XBF was fairly constant until 1993, averaging 60 per cent of the total. Since 1994 this share has been close to 85 per cent (Table 5.1). Thus, as with budgetary funds, XBFs are primarily in the hands of local governments. Again, there is variation across provinces. In 1995 per capita XBRs and XBEs respectively averaged 279 yuan and 258 yuan in the Core, compared with 136 yuan and 133 yuan in the Periphery. Provincial level data indicates that XBRs and XBEs are generally in balance, so that more revenue per capita equates to more expenditure per capita. This clearly benefits provinces where per capita levels are high. Moreover, high XBFs

⁴⁶ Shanghai is an extreme outlier, with per capita revenue of 1524 and 1747 in 1980 and 1995 respectively. Jiangsu is the only Core province with below-average per capita revenue and expenditure.

⁴⁷ These numbers were calculated by dividing revenue from industrial, commercial and enterprise taxes by total revenue. Since some sources to total revenue are negative values (e.g., subsidies to SOEs), the numbers may seem high. They serve mainly a comparative purpose.

⁴⁸ In this case, variation within the Core is noteworthy. Subsidies to loss making SOEs in Shanghai and Zhejiang were equivalent 16.2 per cent and 21.6 per cent of total revenue in these provinces respectively, well above the All China average of 7.5 per cent. All other Core provinces performed better than average in this regard.

⁴⁹ Thus, in 1992 total extra-budgetary revenue was actually 11 per cent higher than total budgetary revenue.

⁵⁰ For example, the innovation fund and heavy repair fund in SOEs were no longer listed as extra-budgetary funds SSB (1997).

TABLE 5.2
PER CAPITA REVENUES AND EXPENDITURES OF LOCAL GOVERNMENTS

Region	Per Capita Revenues and Expenditures of Local Governments (yuan)							
	Per capita Revenue				Per capita Expenditure			
	1980	1985	1990	1995	1980	1985	1990	1995
Beijing	567	535	686	921	164	336	618	1234
Tianjin	547	599	518	692	196	335	464	1043
Hebei	68	81	132	186	55	75	142	297
Shanxi	85	94	178	235	79	133	189	367
Inner Mongolia	22	66	153	191	98	180	282	447
Liaoning	249	231	330	457	98	154	312	678
Jilin	65	94	208	248	78	150	294	474
Heilongjiang	53	111	216	274	80	133	262	472
Shanghai	1524	1514	1325	1747	167	379	589	2058
Jiangsu	107	143	198	244	49	81	146	359
Zhejiang	81	145	240	566	45	93	189	411
Anhui	41	58	93	246	34	66	106	226
Fujian	61	92	190	583	60	113	228	542
Jiangxi	38	60	107	158	49	85	133	272
Shandong	66	88	128	206	41	67	146	317
Henan	44	62	97	137	37	63	104	228
Hubei	73	101	143	173	57	88	156	281
Hunan	57	70	115	170	45	71	131	279
Guangdong	69	116	206	559	48	108	237	769
Guangxi	35	52	110	175	49	77	153	309
Hainan	22	53	113	394	38	99	266	586
Sichuan	35	58	111	150	34	63	132	249
Guizhou	24	51	111	113	46	83	150	250
Yunnan	37	80	208	247	55	107	243	589
Tibet	-32	-31	8	91	252	517	593	1478
Shaanxi	56	68	124	146	65	92	163	292
Gansu	78	80	152	139	64	117	204	334
Qinghai	44	59	162	179	156	248	383	599
Ningxia	55	70	134	175	154	237	311	449
Xinjiang	31	62	141	230	126	210	311	580
All China	89	113	173	272	57	101	186	404
Core	142	178	233	443	52	101	198	532
Core*	78	116	185	387	47	88	181	466
Periphery	70	90	151	211	59	101	182	359

SSB (1996).

tend to go hand in hand with high levels of government funds, further compounding the disparities across provinces.

There is a close link between a local government's financial position and its ability to promote IVE development, and this a major factor contributing to regional disparities. As already noted, local governments are highly dependent on fiscal income from local industry (given

that decollectivization removed their income from farm produce). In wealthier provinces, successful TVEs provide revenue to local governments who in turn re-invest in industrial development, making their locality an attractive place for further investment and development. In contrast, poorer provinces are struggling to provide basic social welfare measures, such as health and education, let alone attempting to promote industry. A problem termed 'fiscal predation' emerges, in which TVEs in less developed regions are being heavily taxed (like their wealthy province counterparts) but re-investment in industrial development is not occurring. The strong financial position of the Core provinces places them in the former category.

5.4 *Preferential Policies: Some Examples*

Guangdong is revered as the great provincial success story in China's reform period. Initial policy support through the central government's regional policies facilitated the rise of reform-minded provincial leaders who in turn came up with innovative local initiatives to obtain foreign capital and technologies and to promote non-state sector developments.⁵¹ Guangdong's geographical proximity to Hong Kong, combined with cultural ties (a common dialect for example), placed it in a prime position to benefit from the reforms. These factors were compounded by the establishment of three of the first four SEZs in the province, the opening up of the province more generally and the extended freedom of the local government to respond to market forces. Guangdong's export performance speaks for itself.⁵² Similar sequences can be observed in other coastal provinces, although the timing of central government support for the reform process varies. Surely not coincidentally, so does the timing of their rapid economic growth.

Shandong, for example, experienced slower growth rates than Guangdong and Fujian during the 1980s.⁵³ Despite the designation of two Open Coastal Cities (OCCs) and two Economic and Technological Development Zones (ETDZs) in 1984-85, the Shandong government remained cautious throughout 1980s. Chung (1997) argues that the province is well known for its conservatism, with historical roots in anti-outsider sentiments, complacency and a desire for self-sufficiency.⁵⁴ Preferential policies from the centre served to significantly mitigate this tradition. In 1987 Shandong was designated the key province for handling economic and non-governmental matters with South Korea and was granted various preferential policies to accommodate Korean business. The establishment of full diplomatic relations between China and South Korea in 1992 brought on an explosion of direct investment from the latter to Shandong. By 1994 South Korea was the second largest recipient of Shandong's exports and third largest source of FDI (after Taiwan and Hong Kong). Significant cultural ties – over 90 per cent of Korea's Overseas Chinese were of Shandong origin – and geographical proximity were clearly important factors. Decisions taken by the central government compounded these advantages.

⁵¹ The subsequent information on Guangdong and Shandong is drawn from Chung (1997).

⁵² See Section 2.3.

⁵³ As Chung observes, only four provinces had two cities designated as COCs (Jiangsu, Guangdong, Zhejiang and Shandong), while only three had two cities designated ETDZs (Jiangsu, Guangdong and Shandong). All Core provinces!

⁵⁴ Between 1978 and 1985, growth rates were actually fairly similar across the three provinces. The divergence is more apparent between 1985 and 1990. In the early 1980s, agriculture was the major focus of reforms. Decollectivization brought about significant productivity improvements across the board. Industrial reforms and preferential policies were more marked in the second half of the 1980s, corresponding with the observed divergence.

Would Shandong have grown as rapidly without central government support? Surely not. The central government's preferential policies provided a signal, which was crucial to local government and foreign investors alike. Local governments invested heavily in infrastructure to attract foreign capital. Investments, both foreign and domestic, supported agricultural development and enhanced the capabilities of peasants to branch out into processing and exporting. TVE development was thereby vertically integrated into provincial development. Even SOE reform can be linked to the combination of enhanced local power, marketization and the opening up of the economy. Share-issuing, sub-contracting, sales and mergers have been combined with foreign capital to finance and renovate old SOEs. In 1993 25 per cent of all industrial enterprises were linked with foreign capital in one way or another.

The Shanghai people have identified 'policy gifts' from the centre as the crux of the economic reform process.⁵⁵ 'Policy is wealth,' according to one of their vice-mayors.⁵⁶ It is not difficult to see how they have reached this conclusion. Shanghai has been booming since 1992. Until then it was still tightly controlled by the central government, in large part due to the centre's heavy reliance on Shanghai for revenues.⁵⁷ Key changes have included the opening of Pudong area in 1990, with incentives such as tax holidays, a free-trade zone, and extended land leases. Opportunities accelerated following Deng's trip south in 1992. Pudong received more preferential policies and Shanghai's enterprise tax rates were lowered. Despite this, taxation reforms have actually improved the municipality's fiscal position. Policies permitting the establishment of the stock market, futures exchanges and liberal foreign investment policies have attracted funds from both overseas and domestic investors. Shanghai has benefited from policy rather than funds from centre. Prior to 1990, Shanghai's share in China's GDP declined continually while growth rates of GDP and per capita GDP were consistently below average. Between 1990 and 1995 Shanghai's share of China's GDP increased and growth rates were well above the national average.⁵⁸ Again, while causality is difficult to prove, the figures seem to speak for themselves.

Dorothy Solinger's analysis of Wuhan provides a fine counter-example for the role of preferential policies.⁵⁹ She sets out to explain why Wuhan has fallen behind since the start of urban reforms in 1984, when the city ranked fourth nationally in terms of gross value of industrial output (GVIO). By 1992 it had fallen to thirteenth. Moreover, whereas GDP grew at a national average rate of 8.7 per cent between 1979 and 1991, in Wuhan it was only 8.0 per cent. Solinger tests three hypotheses. First, as an inland locality which was previously heavily dependent on large, state-owned, heavy industry, Wuhan may have fallen behind once reforms were introduced. Second, its leadership (at the city level) may have been overly conservative and reluctant to innovate. Third, a conspicuous lack of government policies directed towards Wuhan may have been the cause: 'potent central policies themselves, policies that actually interfered with rather than fostered the market, and that deliberately sleighted some areas and favoured others (such as preferential policies for some regions but

⁵⁵ This paragraph draws on Jacobs (1997).

⁵⁶ Xie Keqiang, quoted in Jacobs (1997: 169).

⁵⁷ Prior to the reforms, Shanghai provide 1/5 to 1/4 of total central government revenues. Since 1978 it has remained the largest contributor to revenues, contributing 1/6 of the total as late as 1992.

⁵⁸ See Table 2.1 for GDP shares.

⁵⁹ Solinger (1996). As Solinger points out, while Wuhan (in Hubei province) is a city and not a province, during the period under study it was a 'centrally-planned city', meaning that it at least purportedly had the economic powers of a province.

not for others....)'⁶⁰ The detailed case study concludes that only the third of these hypotheses holds. Favoured cities, such as Guangzhou (in Guangdong province) and Shanghai had three principal advantages, all of which were absent for Wuhan for over a decade. The first, and arguably the only one that really mattered, was 'preferential policies of the central government, which entailed not just a head start and continuing advantages but much more – centrally engineered market-like packages of incentives with which to appeal to the outside world... '⁶¹

6. Part I: Conclusions

Prior to the commencement of economic reforms in 1978, numerous historical factors contributed to the emergence of industries in southeast China – the Core – which were in line with both regional and national comparative advantage. Economic reforms through the 1980s and 1990s, ranging from the decollectivization of agriculture to the opening up of the economy and the loosening of the central government's administrative control, have enhanced the role of market forces. In contrast to the Maoist era, the regional development strategy adopted in the 1980s clearly favoured coastal provinces, and Core provinces in particular, further compounding the cumulative forces of history and the economic transition. The decentralization of economic decision-making to lower levels of government, combined with preferential policies granted by the central government, facilitated the rise of reform-minded local leaders in the Core, who implemented various policies to attract foreign technologies and investment, and to promote the development of the non-state and export sectors.

It is hardly surprising that other parts of China, faced with the legacy of Mao's heavy industrialization strategy, generally higher shares of state-owned industry, less open economies and a lack of central government preferential policy support, have not fared as well as the Core region in the reform period.⁶² Fiscal decentralization has amplified regional differences. As provincial and lower levels of government have come to rely increasingly on their own revenues to source expenditure within their own jurisdiction, the rich have become richer, and thus more able to promote industrial development, and the poor have become poorer, resorting to fiscal predation in order to provide even the most basic social services. In essence, vicious and virtuous circles, created largely by government policies, abound in China's regional development story. The government now faces the difficult task of trying to create the former in China's less developed regions. How it should go about achieving this is an extremely complex question, which Part II of this paper seeks to address.

PART II

7. Introduction

While narrowing the interregional development gap in China has been identified as one of the major issues affecting reform and development in the 1990s, there is also a continuing

⁶⁰ Solinger (1996: 4).

⁶¹ This explanation was given by a Wuhan bureaucrat in Solinger (1996: 33). The other two advantages were higher profit retention ratios (along with greater discretion in the use of retained funds) and foreign investment. The latter was attracted by the combination of preferential policies and the higher infrastructural investments made affordable by higher retention rates.

⁶² Although it should also be noted that their experience, by international standards, has still been quite remarkable.

emphasis on the progression towards a fundamental change in the economic structure, from a planned economy to a socialist market economy.⁶³

Ascertaining the efficacy of policies designed specifically to address regional development is a difficult task in itself. The effects of particular policies are virtually impossible to isolate and cannot be readily quantified. Moreover, these policies need to be considered in the context of an economic framework that is undergoing transition. This affects the choice of instruments available to the government in order to reach its regional policy objectives. To complicate matters further, optimal policy choices from the regional policy perspective may not coincide with policies designed to complete the transition. Numerous policy choices, concerning a diverse range of issues such as SOE and financial sector reforms, labour mobility and the fiscal system, have direct or indirect implications for regional development. To untangle this combination of complexities will take considerable effort on behalf of the government. However, the following analysis is not intended to cast doom and gloom on the potential role of the government in alleviating regional disparities. As stated in Part I, government policy has played a decisive role in determining the spatial structure of industry and consequent patterns of regional development throughout China's reform era. It will almost certainly continue to do so in the future.

8. Theory and Reality

8.1 Economies of Scale and Industrial Agglomeration

The role of economies of scale in economic development is hardly new. In the *Wealth of Nations*, Adam Smith wrote that 'the division of labour, however, so far as it can be introduced, occasions, in every art, a proportionate increase in the productive powers of labour,'⁶⁴ thus identifying the important role of increasing returns in the production process, i.e., internal economies of scale. His proposition that 'the division of labour is limited by the extent of the market'⁶⁵ established the notion that the potential gains from realizing these economies depends on the size of the market.

Young (1928) modified Smith's proposition to include the converse concept that the extent of the market depends on the division of labour. He also stressed that 'the mechanism of increasing returns is not to be discerned adequately by observing the effects of variations in the size of an individual firm or of a particular industry. What is required is that industrial operations be seen as an interrelated whole.'⁶⁶ Thus, Young conceived the notion of complementarities between industries and recognized their role in ensuring that change is 'progressive and propagates itself in a cumulative way.'⁶⁷

⁶³ Alleviating regional disparities and completing the economic transition were both identified as major objectives in a report delivered by Premier Li Peng on the 'Draft Outline of the Ninth Five-Year Plan (1996-2000) for National Economic and Social Development and the Long-Term Target for the Year 2010' at the opening ceremony of the Fourth Session of the Eighth National People's Congress on 5 March 1996.

⁶⁴ Smith (1786: 110).

⁶⁵ Smith (1786: 121).

⁶⁶ Young (1928: 539).

⁶⁷ Young (1928: 533).

Marshall (1920) further distinguished between internal and external economies of scale, the latter showing themselves in the organizational structure of an industry as a whole. He identified three distinct sources of external economies. First, a concentration of firms in an industry at the same place provides a *pooled labour market* for workers with specialized skills. Employers are likely to locate in a place where they can find a good choice of workers with the special skills they require, while people seeking employment will naturally choose the places where they expect those employers to be. Second, an industrial centre can support a large number of *specialized local suppliers*, enabling the provision of inputs specific to an industry in greater variety and at lower cost. Third, information flows more easily over smaller distances, so that the localization of industry creates the opportunity for *knowledge (or technological) spillovers* between firms. The idea that the clustering of producers in a particular location yields advantages and that these advantages in turn explain such clustering is a vital concept for understanding the geographical unevenness of industry and development.

8.2 Three Simple Models of Economic Geography

Model 1

Krugman's (1991) Core-Periphery model describes a multi-region economy with two productive sectors, agriculture and manufacturing. The agricultural sector produces homogenous goods using constant returns to scale technology in a perfectly competitive market. The manufacturing sector consists of a large number of differentiated products, each produced using increasing returns to scale technology in a monopolistically competitive market. There are two factors of production: immobile 'farmers' who produce agricultural goods and mobile 'workers' who produce manufactures. Transport costs only apply to manufacturing. Farmers are exogenously divided between locations while the manufacturing labour force in each location is proportional to manufacturing production there. Workers migrate to locations with above-average wages according to a simple law of motion. If a manufactured good is produced in only one location, the manufacturer must incur transport costs to service the other markets. At the other extreme, if it is produced everywhere, additional fixed set-up costs are incurred, but there are no transport costs. With sufficiently large economies of scale, a profit-maximizing producer will establish only one plant. To minimize transport costs, they will choose a location with large local demand. And local demand will be large where the majority of manufacturers choose to locate. This circularity tends to keep a manufacturing belt in existence once it is established, no matter how low transport costs become; thus forming the 'core' of an economy, supported by an agricultural 'periphery'. Which location becomes the core boils down largely to accidents of history.⁶⁸

Model 2

The story according to Model 1 is altered in an important way when labour is immobile across regions, as in the two-region model by Krugman and Venables.⁶⁹ As in Model 1, when transport costs are very high each region will be necessarily self-sufficient in both manufacturing and agriculture. As transport costs (or barriers to trade) fall industry will be

⁶⁸ Krugman simulates a 12 region version of the model. Depending on the parameters chosen, two or three of the regions eventually become industrial centres supported by agricultural peripheries. In the two region case, initial size of the manufacturing sector in each largely determines which one becomes the core.

⁶⁹ Krugman and Venables (1995).

drawn to the location with the largest market.⁷⁰ The benefits arising from locating near suppliers of intermediate goods (backward linkages) and from gaining access to a variety of intermediate goods which reduces the cost of final goods (forward linkages) outweigh the costs of transporting the products to their final destination. Real wage rates will diverge as labour demand rises in the industrializing region and falls in the periphery. As transport costs fall even further the importance of being close to the market declines until at some point the benefit of lower wages in the periphery outweighs its remote location. Manufacturing will relocate from the core to the periphery, forcing a convergence in wage rates and industry structure.⁷¹

Model 3

Venables and Puga have developed a model that describes the spread of industry from country to country (or region to region).⁷² All industrial sectors are initially agglomerated in one region, tied together by input-output links between firms. Growth in this region induces a transfer of labour from agriculture to manufacturing and an increase in wages.⁷³ Eventually this drives some firms away and when a critical mass is reached industry expands in another country, driving up wages there. Several interesting, even if intuitively obvious, points arise. First, stronger linkages tie firms more tightly to existing agglomerations, postponing the spread of industry. Second, labour-intensive industries tend to leave first as they are most affected by higher wages in the industrialized region. Third, upstream industries face higher costs of market access when they move away from existing agglomeration but are not heavily dependent on the proximity of suppliers of intermediate inputs. This suggests that they tend to leave first, having a significant effect in pulling downstream industries along in their wake. Finally, weakly-linked industries benefit less from agglomeration and are therefore the first to relocate in response to wage differentials, being gradually followed by more strongly linked industries.

8.3 *Relevance to China*

The theoretical concepts discussed above can be employed to examine various aspects of Chinese regional development. Three examples are considered below: the costs and benefits of industrial agglomeration; the relocation of industry; and labour market reform.

⁷⁰ Transport costs can also be viewed as a proxy for barriers to trade. Falling transport costs can then be used to illustrate the process of globalization or increasing economic integration across nations/regions.

⁷¹ Krugman and Venables draw on the model to discuss the implications of further economic integration in Europe. They argue that in the short run peripheral economies may in fact lose industry to better developed industrial core countries like Germany and France. This is in contrast with neoclassical predictions that peripheral economies, with their relatively low wages, stand only to benefit from further European integration. This is directly analogous to the impact of integration of the Chinese national economy, a major component of the reform process. Analysis of this lies beyond the scope of this paper.

⁷² Puga and Venables (1996).

⁷³ Growth is captured by assuming an exogenous increase in the labour endowment. Assuming an income elasticity of demand for manufactures larger than unity, this increases the demand for manufacturing relative to agriculture.

The Costs and Benefits of Industrial Agglomeration

Industries located in Core provinces no doubt benefit from the localized external economies associated with industrial agglomeration. Technological and informational spillovers stem from both relatively well-developed domestic local economies and more extensive links with the outside world, particularly Hong Kong and Taiwan.⁷⁴ The Core's better developed industrial centres have attracted a large number of specialized suppliers, both domestic and foreign. Guangdong and Fujian in particular have benefited from the many and various enterprises that have chosen to relocate from Hong Kong and Taiwan.⁷⁵ In turn, these enterprises were attracted to the relatively low cost environment of the provinces' SEZs, with preferential policies including lower tax rates than the rest of the country (15 per cent compared with 30 per cent). The pooled labour argument is relevant to the Core for a number of reasons, including a relatively highly skilled labour force; a relatively large share of total labour employed in manufacturing (22 per cent compared with 13 per cent in the Periphery); and a large pool of floating labour (which helps hold the wage down). These localized economies of scale, combined with the Core's superior infrastructure and transport systems, form strong inter-industry linkages within the region.⁷⁶ It is largely through these linkages that cumulative growth processes emerge, resulting in divergent levels of regional development.

Offsetting the benefits of industrial agglomeration and external economies are a number of costs associated with the Core's rapid industrialization. These include rising labour and land costs, difficulties in obtaining the necessary raw materials for processing industries, and environmental degradation.⁷⁷ Not surprisingly, average wages have grown more rapidly in the Core and are now significantly above average. Starting from a slightly below average level in 1980, the average annual wage in the Core rose to 6,849 yuan in 1995, 33 per cent higher than the Periphery's wage of 5,132 yuan. Emerging cost differentials are sharpest in the TVE sector. In 1996 average wages in Core TVEs were 80 per cent higher than in the Periphery. Rising costs are reflected in lower profit asset ratios in the Core: profits per 100 yuan of fixed assets were 25 yuan compared with 32 yuan in 1996. With close to 6 billion and 5 billion yuan in total fixed assets in the Core and Periphery respectively, this amounts to a sizeable difference.⁷⁸

The Relocation of Industry

The relocation of production away from the Core region is already occurring in some industries in China – particularly labour-intensive industries, as predicted by Venables and Puga (Model 3). For example, recently 20 million textile spindles have been relocated to central China, based partly on decisions taken by central and coastal governments. Soaring

⁷⁴ The benefits of this are hard to quantify, but one simple indicator is suggestive: Core provinces have more than twice as many patent applications granted per capita as does the Periphery (5.2 patent applications granted per 10,000 people, compared with 2.4 (SSB 1997)).

⁷⁵ Naughton (1997) discusses the role of Hong Kong and Taiwanese suppliers in Guangdong and Fujian.

⁷⁶ For example, Core provinces on average have 1.5 times as many railways per kilometre, 4 times as many highways per kilometre and 13 times as many waterways per kilometre as Periphery provinces. They also have more cars, telephones and computers per capita. The list goes on. (Source: SSB 1997).

⁷⁷ Yang (1997).

⁷⁸ SSB (1997).

costs in labour, cotton prices, utilities and the provision of living quarters for workers in SOEs are the major factors underlying the decision to relocate. Shanghai is perhaps suffering the most from rising costs. The central government's plan is that Shanghai local officials should coordinate with Xinjiang province for a mass relocation of the industry. Xinjiang, where major cotton bases are located, has started projects that will significantly increase spinning capacity, resulting from cooperation between the region's textile enterprises and traditional textile enterprises in Shanghai, Beijing, Shandong and Sichuan. The plan, jointly launched by the China National Textile Council and the State Planning Commission, is to shift 500,000 spindles of cotton to west in the Ninth-Five Year Plan, in a bid to make Xinjiang the largest cotton yarn and cloth manufacturer in China.⁷⁹ This could be viewed in the context of an 'industry-specific Big Push': the relocation of a large number of textile enterprises could prove profitable even if each individual enterprise when left to its own devices may not choose to move.⁸⁰ Arguably, the existence of coordination failures provides justification for government intervention in this case.

Labour Market Reform

As with most other aspects of China's economic reforms, the move towards fully flexible labour markets is being undertaken as a gradual process. In the Maoist era the household registration system (*hukou*) severely discouraged movement by preventing people outside their own area from accessing social services such as housing, education and hospital care. There has been some increase in interprovincial mobility during the reform period although certain limitations still remain.⁸¹ Perhaps the most commonly cited indication of increased mobility is China's migrating ('floating') population, estimated at 70 million and comprising mainly rural workers who have left their homes in search of higher wages and better jobs.⁸² The recipients of most of this migrant labour, not surprisingly, are the Core provinces, while the sources are the poorer provinces in western China. For example, workers leaving Sichuan have recently been estimated at around 3 million a year,⁸³ while Shanghai's floating population reached about 4 million in 1998 (bringing the city total to 17 million).⁸⁴ The majority of these are manual labourers, but there are also high-tech engineers, technicians, university lecturers and government administrators.

Large-scale emigration has reduced the population burden in Sichuan and provides an important source of financial income. However, counteracting this is 'brain drain.' The large

⁷⁹ Xinhua Newsagency (27/10/97).

⁸⁰ Rosenstein-Rodan (1943) advocated a big push into industrialization in the form of co-ordinated investment across industries. His main point was that the simultaneous industrialization of many sectors of the economy could be profitable even when no sector can break even industrializing alone, because of the contribution of industrialization in one sector to enlarging the size of the market in other sectors. Murphy, Shleifer and Vishny (1989) encapsulate the principle components of Rosenstein-Rodan's paper in the context of an imperfectly competitive economy with aggregate demand spillovers. They show that the interaction between internal economies of scale, inter-industry linkages and elastic factor supplies to the industrializing sectors gives rise to external economies which enable firms to profitably industrialize. They recognize the potential role for government in overcoming the coordination failures resulting from multiple equilibria.

⁸¹ A World Bank study (1994) discusses in detail the present state of affairs concerning labour mobility both across sectors and across provinces in China. It concludes that while sectoral mobility has improved significantly through the reform period, interprovincial mobility remains fairly poor.

⁸² Reuters (08/07/98). Estimates vary from 50 to 100 million.

⁸³ Montinola *et al.* (1995).

⁸⁴ Reuters (7/6/98).

number of younger and better educated people leaving has negative effects on cultural, social and economic life. A lack of talented people makes it difficult to promote new agriculture technologies and techniques in the countryside.⁸⁵ Gradual reforms may in fact be entirely desirable in this case. If labour were completely free to move, less developed regions would likely suffer even more severely from brain drain and might ultimately be condemned to a peripheral position serving the industrial base on the coast (Model 1). Some restrictions on migration may mitigate this problem, by contributing to wage increases in the Core in response to increased labour demand. This in turn would encourage relocation to less developed regions (Model 2). Of course, this is a highly stylized story, and it would be dangerous to draw from it substantive policy conclusions. At the very least, however, it illustrates how policy decisions regarding the overall process of economic reform have consequences for patterns of regional development. Policymakers, in a transition economy in which the alleviation of regional disparities is a major policy objective, should clearly take this into consideration.

A Few Broad Policy Implications

The discussion thus far suggests numerous potential roles for government in trying to initiate self-perpetuating processes of industrial development in backward regions. For example, by concentrating new investment in a limited number of centres, it might be possible to create linkage and scale effects to ensure self-sustaining growth. Fiscal transfers, by increasing the income of a backward region, might increase demand to the point where certain industries became profitable. Similarly, expenditure on infrastructure and transport would lower the costs associated with relocating to less developed areas. By coordinating the investments of interdependent enterprises (either through state ownership or some other coordination mechanism), a 'big push' into a low wage region might benefit all. And the list goes on.

Unfortunately, it is impossible to accurately quantify the level of these measures that would be effective in altering industrial patterns. This often leads to the conclusion that it is best not to take the policy implications too seriously.⁸⁶ I disagree with this approach. The intuitive insights which the theories provide offer a great deal to the understanding of broad options available to governments in addressing regional disparities. Given the continuing prevalence of various government forms of ownership, particularly at the township and village levels, and numerous other mechanisms through which government actions affect the general economic environment, it is particularly pertinent to consider the government's role in the Chinese case.

9. Regional Development Policy in the 1990s

9.1 Introduction

For political, social and economic reasons, the central government's regional development policy has shifted its focus in the 1990s to the less developed provinces in central and western China, referred to collectively as the Interior.⁸⁷ The Eighth Five-Year Plan (1991-95)

⁸⁵ Hong (1997).

⁸⁶ Venables (1996: 60), for example, discusses agglomeration and policy concluding that 'attempts at active policy are unlikely to be particularly successful in the real world.'

⁸⁷ Yang (1997) discusses in detail the evolution of China's regional development strategies in the late 1980s and early 1990s.

advocated an absence of regional favouritism in contrast with the Seventh Plan, which openly supported and encouraged unbalanced growth through the Coastal Development Strategy. The Plan adopted several policies reflecting this shift, such as introducing the Open Door Policy to interior provinces (the so called 'Opening up in all Directions Policy').⁸⁸ A new approach to industrial policies emphasized industry-specific rather than region-specific measures, focusing on the development of agriculture, energy and other basic industries, which were believed to be the cause of bottlenecks in China's industrial development. Because these industries were relatively more important to interior provinces, this represented a *de facto* policy shift in favour of interior provinces.⁸⁹ Counteracting this, however, was Deng's southern tour in 1992, in which he strongly advocated more rapid growth in the southeastern provinces, combined with the central government's inability to back its policy shift through fiscal measures. In essence, the coastal region – particularly the Core – continued to outpace the rest of the country. The Ninth Five-Year Plan (1996-2000) reconfirmed the central government's commitment to addressing interior development, at least on paper. The following sections outline the main components of this current regional policy framework, considering in each case the realized and/or potential effectiveness of each.⁹⁰

9.2 *Fiscal-, Credit- and Investment-Based Measures*

The central government will undertake numerous fiscal-, credit- and investment-based measures to promote development in interior provinces. In terms of the models presented above, these can be viewed simply as measures to increase the relative attractiveness of locating production in hitherto peripheral provinces. There will be a gradual increase in the proportion of centrally-controlled investment allocated to interior regions. The newly created policy banks will gradually increase the value of preferential loans to interior areas, specifically for investments in infrastructure such as power stations and railways. The interior will also receive most of the development loans from foreign governments and international organizations. Additionally, the Centre's anti-poverty policy, introduced in 1994, has set the target of eliminating the abject poverty of 80 million people by the year 2000. The majority of these people are located in counties in interior provinces, where the aim is to raise annual net income through the provision of roads, water, electricity and improvements in education.

The major constraint facing the central government in the successful implementation of these measures is its present financial situation. As discussed in Part I, fiscal decentralization has resulted in declining central government revenues. Moreover, budgetary sources are an ever-diminishing component of both revenue and expenditure. The fiscal reforms introduced in 1994 should improve the centre's financial situation in the longer term, but for now the government remains severely constrained by a lack of funds. In addition, ongoing reforms in the financial sector render state-directed credit and investment less vital to economic development, as funds become increasingly available through the commercial banking sector. As with most other aspects of the reform process, the coastal provinces are in a better position to take advantage of these changes. As the transition progresses, and until the central government is able to secure a stronger financial base, it is unlikely that these measures alone will contribute significantly to addressing the regional problem. Recognizing this, the central government has introduced various other measures that require less financial support.

⁸⁸ Zhao (1995).

⁸⁹ This is identified by Yang (1997).

⁹⁰ The policy components discussed in this section draw heavily on Yang (1997), Chapters 5 to 7. The conclusions drawn here on policy effectiveness and potential are my own and do not necessarily correspond to Yang's views.

9.3 *Foreign Trade and Investment*

As an extension of the 'Opening up in all Directions Policy' several initiatives have been taken to promote the flow of overseas investment to the interior and to improve the region's trading links with the outside world. The Ministry of Foreign Trade and Economic Cooperation (MOFTEC) has produced a set of policy guidelines that rectify previous discrepancies between coastal and interior foreign investment policies. The interior's geographic disadvantage and poorly developed links with the outside world are fairly major obstacles to overcome in the process of trying to attract foreign investment to the region. While the absolute value of investment has increased, the interior's share of China's total FDI remains low.⁹¹ To overcome the region's disadvantages and to compensate for the past bias towards coastal development, interior politicians were particularly vocal in the early 1990s in demanding that their provinces be granted preferential policies and SEZs of their own. A heated debate over the future of existing and potential SEZs ensued and in 1995 the central government confirmed its policy stance. Existing SEZs will be allowed to continue to offer preferential tax rates (15 per cent compared with the nation's 30 per cent), and to conduct various other reform experiments, including the national treatment for foreign firms. However these privileges will be phased out by the year 2000. Meanwhile, the centre will not allow interior provinces to establish SEZs of their own, but as a concession they will open more interior cities to foreign investment and grant interior provinces the same authority as coastal provinces and SEZs to approve investment projects.

While representing a step in the right direction for interior provinces, these policy measures seem insufficient to cause any significant reversal in regional development patterns. As discussed in Part I, preferential policies granted to coastal governments played a vital role in promoting development, particularly when combined with the region's geographical location and links with Hong Kong, Taiwan and Korea. The introduction of a more level-playing field certainly improves the prospects for interior development, but it is likely to take quite some time before the advantages of the coastal region are outweighed by what the interior has to offer. There might be some reason to argue for a more favourable set of preferential policies to less developed provinces in order to compensate for past policy decisions. However, the central government has expressed an unwillingness to do this, justified in part by China's pending accession to the WTO, a prerequisite for which is a level-playing field in the domestic economy. This brings us to perhaps the least emphasized but potentially the most important component of the central government's regional development strategy – cooperation.

9.4 *Cooperative Measures*

The central government has called for increased cooperation between coastal and interior provinces in two distinct forms. First, there is the expectation that coastal provinces will provide direct aid to poorer areas. This is particularly necessary for areas like Tibet, which have little to offer coastal provinces in terms of economic benefits. The central government has engaged in a bit of 'arm-twisting' to encourage coastal cities and provinces to provide

⁹¹ The Periphery's share of China's FDI in 1996 was 30 per cent (with a population share of 74 per cent). Excluding Beijing and Tianjin, the share falls to 22 per cent (with a population share of 72 per cent).

funds for industrial development.⁹² Shandong recently announced a '10-year plan to help Tibet,' aimed at strengthening the position of agriculture, developing secondary industries, invigorating trade and tourism and accelerating the training of talented people in Tibet.⁹³ The Core provinces alone have funded 62 construction projects in Tibet, valued at more than 2 billion yuan.

Second, 'mutually beneficial cooperation' is being promoted, mainly on a bilateral basis. The more developed coastal provinces, facing rising costs and difficulties in obtaining raw materials, are being encouraged to look inward, where there is abundant cheap labour, natural resources and a large potential market. The interior provinces clearly stand to benefit from the relocation of industries previously located along the coast, and the transfer of capital, managerial expertise and technology that goes with it. The central government is hoping that the coastal provinces will transfer up to one third of its labour-intensive raw material processing industries to the interior.

There are now countless examples of 'mutually beneficial cooperation' between provinces. Shanghai has recently signed five major contracts with Xinjiang Uighur Autonomous Region. The Shanghai Municipal Economic Cooperation Office, designed to promote interprovincial cooperation, has initiated more than 10,000 economic cooperation projects with other parts of the country. By 1995 the city's light industry, textiles, motor vehicles and building materials sectors alone had started joint ventures with other parts of the country with total investment of 3.7 billion yuan, some 1.8 billion of which was invested by Shanghai. Different counties in Shanghai have established partnership contracts with 19 counties and cities in Sichuan.⁹⁴ Shenzhen has also expanded economic links with the interior, investing 12 billion yuan in cooperation with interior provinces in recent years. The production of spare parts for some 5 million bikes, 230 million watches and 2 million telephone switch systems have been relocated to inland provinces. This has reduced production costs for Shenzhen and boosted development in interior provinces.⁹⁵

The central government has facilitated this process of relocation through policies providing information and incentives. It is difficult at this early stage to assess the effectiveness of these policies, especially in the absence of detailed data on industrial relocation and counterfactual evidence. However, given the vast number of cooperative projects that have emerged in recent years, it seems plausible to claim that these policies have the most potential to help the government realize their regional policy goals and should perhaps be receiving more emphasis than they are at present.

9.5 *Rural Enterprise Development*

At a national symposium held in 1992 it was generally agreed that disparities in regional development were largely due to disparities in rural enterprise development.⁹⁶ In 1993 the State Council issued its 'Decision on Speeding up the Development of Rural enterprises in Central and Western Regions,' as an explicit attempt to address differentials in TVE growth.

⁹² Yang (1997: 97). A government official in Beijing put it even more bluntly. The Shanghai municipal government is 'ordered to cooperate' (i.e. donate funds to) Tibet. With prospects for promotion on the line, Shanghai officials readily comply (Beijing Interview, March 1998).

⁹³ Xinhua newsagency (28/12/96).

⁹⁴ Xinhua newsagency (20/10/95).

⁹⁵ Xinhua newsagency (22/10/95).

⁹⁶ Yang (1997).

The relocation and promotion of rural enterprise development partly reflects an urgent need to help absorb a vast surplus labour supply, mainly in interior provinces.⁹⁷ The policy package illustrates the combination of policy tools that the central government can employ to address regional issues.

The People's Bank of China (PBC) and the policy banks are expected to direct credit and special loans to interior-based rural enterprises. Newly-established rural enterprises in old revolutionary base areas, minor nationality regions, border regions and designated poor areas are exempt from income tax in their first three years (despite the recent introduction of new tax laws stipulating uniform taxes for all enterprises of all forms of ownership). Provincial governments in Inner Mongolia, Xinjiang, Ningxia, Tibet, Guangxi, Yunnan and Qinghai have been authorized to implement special policies for rural enterprise development. In addition the 'East-West Rural Enterprise Cooperation and Demonstration project,' officially launched by the Ministry of Agriculture in 1994, seeks to set up 100 cooperation and demonstration zones with output values of 1 billion yuan each by 2000, and to assist 100 pairs of cities and counties in establishing bilateral cooperation in rural development.

While still in its infancy, this set of policy measures seems to have prompted several local governments in coastal provinces to consider moving westward, particularly provinces in the Core region. Examples include Zhejiang's Wanxiang group which recently announced its 'Going West Scheme,' Jiangsu's Huaxi village, which is investing 20 million yuan in Heilongjiang and Ningxia and Guangdong's Nanshan group, which plans to invest 200 million yuan in Guangxi. Between 1995 and mid-1996 over 10,000 cooperative agreements involving 30 billion yuan were signed between rural enterprises in the interior and coastal regions.⁹⁸

10. The Role of Local Governments

As discussed at length in Part I, China's decentralization has increased the incentives of local governments to foster local economic prosperity. This is one of the most essential components of 'federalism, Chinese-style,' and also a major part of China's economic reforms. Montinola *et al.* (1995) identify competition among jurisdictions as the most important consequence of this. Local government are induced to provide a hospitable environment for factors, through the provision of infrastructure, utilities, and market access. Given the vast number of decision-makers involved, it is natural to expect a diverse set of policy choices and experiments following the introduction of decentralized measures. As the results of these experiments become known, however, individuals and policymakers will update their expectations about the effects of various policies, providing an important feedback effect not available under a unitary system imposing a single national experiment. One example of this was the 'zone fever' in the early 1990s in which there was a country-wide rush to establish various special zones offering all kinds of preferential treatment to attract industrial enterprises.

The economic structure in the Maoist era has often been referred to as a 'cellular economy,' defined as independent, comprehensive and relatively autarkic sub-systems at each and every geographical and sectoral unit designed to operate self-sufficiently.⁹⁹ Despite efforts in the

⁹⁷ When they say vast, they mean vast: surplus labour was officially estimated at 120 million in 1994 and is expected to rise above 200 million by 2000.

⁹⁸ All these examples are taken from Yang (1997).

⁹⁹ Lin (1995). Lyons (1987) gives a classic account of the reasons underlying the emergence of this cellular structure in the Maoist era.

reform period to integrate and unite the national economy, there is evidence to suggest that it still remains fragmented across provincial boundaries.¹⁰⁰ This is not surprising viewed in the context of the Montinola framework. The rise of 'provincialism,' or local protectionism, is a natural consequence of the competitive nature of the decentralized system.¹⁰¹ A province of more than 80 million people (i.e., Shandong), with access to the international market and the support of the central government can perhaps afford some degree of provincialism with respect to the rest of China (even if this is not entirely advantageous). In contrast, for a small land-locked province in the interior, surrounded by other relatively poor provinces and with much less access to the outside world, provincialism is surely a ticket to disaster.

Cooperative measures and other forms of coordination at the provincial level and below have arisen to provide a potentially effective means of overcoming provincialism and promoting local development, even for those provinces that are fiscally constrained. For example, several provinces have started to coordinate the huge floating population, which can overwhelm local governments in providing basic services such as food, water, transport and housing.¹⁰² In 1992 Guangdong, Hunan, Guangxi and Sichuan established an Interregional Labour Coordination Centre. Migrant workers in Guangdong must obtain approval from labour-management organizations in home provinces. In return, Guangdong provides information about labour demands. In Sichuan province, total migrant labour is estimated at around 3 million per year. Remittances from migrants have totalled as much as 3-5 billion yuan annually, accounting for 10 per cent of net farmer income. Provincial authorities have promoted labour export, in part through establishing a labour development office. Labour export is an important means of developing backward economies. It requires less capital and offers high returns. Individuals leave with nothing and return with fortunes, bringing back capital to invest in the local economy's TVEs.¹⁰³

Thus, both competition and cooperation between provinces can benefit China's less developed provinces. Fair competition, however, requires further efforts from the central government to address the fiscal situation of poorer provinces. This would provide local governments in all areas with the incentive, and ability, to encourage economic development in their own jurisdictions. As discussed in Part I, the central government's verified approval and support can be enough to kick-start this process. Preferential policies to less developed regions, or 'policy gifts' as the Shanghaiese put it, would signal the central government's commitment to addressing regional disparities. While the establishment of SEZs in interior provinces has been effectively eliminated from the policy arena, this does not mean that other forms of encouragement should be abandoned.

11. Some Broad Observations and Conclusions

This paper has comprised two parts. Part I sought to establish the major factors that have aided industrial development in the 'Core' provinces in southeast China, namely Shandong, Zhejiang, Shanghai, Jiangsu, Fujian and Guangdong. Historical and geographical advantages have been compounded by the general process of market oriented reforms, and more

¹⁰⁰ See World Bank (1994) for details.

¹⁰¹ Montinola *et al.* (1995) and Yongnian Zheng (1998) both explain this in more detail.

¹⁰² This example is taken from Montinola *et al.* (1995).

¹⁰³ This section draws on Hong (1997). An interesting side point is that it is restrictions on permanent migration that encourage the eventual return of migrant labour to their original location. In a freer society migration would more likely be permanent, leaving the original location drained of knowhow and funds.

specifically by the central government's preferential policies, the opening up of the economy to foreign trade and investment, and economic decentralization. This combination of factors has strengthened the role of local governments in facilitating economic development, with the Core provinces being the main beneficiaries. The result has been the emergence of regional disparities in the 1990s which has become a major policy concern.

Part II turned to a consideration of various policy issues. The theoretical basis for analysis focused on the disequilibrium nature of the development process and illustrated numerous examples of relevance to the Chinese economy. While it is difficult to draw substantive policy conclusions on this basis, it is certainly suggestive of numerous policy measures that could potentially contribute to the alleviation of regional disparities. Some might argue that rising costs in the Core will eventually cause firms to relocate to less developed provinces of their own accord. However, when regional disparities are ranked as one of the top ten policy objectives on the reform agenda, 'eventually' is perhaps not soon enough. Moreover, in the presence of economies of scale and imperfectly competitive markets, coordination failures may arise in the sense that it would be profitable for a large number of firms to relocate simultaneously, but unprofitable for a single firm to go it alone. The government, both through its various forms of ownership and through the promotion of coordination and cooperative policies, is well positioned to address this problem.

The discussion also sought to illustrate how the choice of theoretical framework can affect policy choices, and moreover, how most policy decisions in a transition economy have indirect implications for regional development. The issue of labour mobility was a case in point. Neoclassicists would generally recommend perfect mobility to enable factor price equalization across regions and production based on comparative advantage. This, however, might drain the less developed regions of human capital vital for development, condemning them to a permanent position on the agricultural periphery, serving a richer and more advanced industrial core. From a regional equality perspective, China's more gradual approach to labour market reforms may be more appropriate. A more detailed analysis is clearly needed to ascertain the relevance of various theoretical frameworks in the Chinese case.

The central government's development policy shift towards interior provinces is reflected in numerous fiscal-, credit- and investment-based policies; foreign trade and investment policies; and cooperative measures. The efficacy of the first set are constrained by the central government's fiscal position and ongoing reforms in the financial sector. The geographical and historical disadvantages of most interior provinces hinders the effectiveness of promoting external linkages, although recent policy steps appear to be in the right direction. Various cooperative measures perhaps stand the greatest chance of attracting industrial development in less developed areas, particularly in combination with other policy measures.

Several subsequent points emerged concerning the role of local governments in Part II. First, 'federalism, Chinese-style' induces competition among localities that should ultimately result in a fairly level-playing field across China. However, this will take time and also efforts by the central government to discourage protectionism and encourage cooperation among provinces. Second, cooperative measures and other forms of coordination are emerging at the provincial and lower-levels of government as a potentially effective way of facilitating development. Third, the dismal situation of fiscal balances in poorer regions contributes to a vicious cycle in which industrial development is neglected. A stronger fiscal base for the

central government, translating to larger transfers to those provinces most in need, is an essential component of the regional development strategy.

A final point concerning local governments, evidenced in Part I, is that without encouragement or 'policy gifts' from the central government, lower levels of government often lack the conviction to pursue economic reforms. If the central government is sincere in its desire to help alleviate regional disparities, it should continually assure interior governments of this by guaranteeing support for local government initiatives. Moreover, policies should extend beyond interior provinces to ensure that those in the northeast, which have been less successful in many ways than their southeastern counterparts, do not become the next region of neglect in China's regional development story.

As stated at the outset, in the absence of counterfactual evidence it is difficult to quantify a causal link between government policy and economic development. Skeptics of government policy and adherents to the neoclassical view are likely to claim that regional disparities will sort themselves out in the long run. With perfectly competitive markets, perfect factor mobility, complete access to information, zero transport costs, and no barriers to trade, each region will specialize in production according to comparative advantage and industrial relocation will occur when market forces dictate that it should. Factor price equalization, combined with lump-sum fiscal transfers if necessary, will address all concerns of regional income inequality. Given these assumptions, in the very long run this is possibly true. But the assumptions are dubious to say the least. And we all know where we'll be in the long run! Until then, the Chinese government can, and will, have a vital role to play in affecting the structure and distribution of industry across China's regions and consequent levels of income and development. It may face difficult trade-offs in jointly pursuing its regional policy and transition goals, but this is not to suggest that the former will prove impossible. It is too early to know one way or the other whether the government will succeed in alleviating regional disparities. But the potential is surely there.

Bibliography

- Brühlhart, M. and Torstensson, J. (1996) 'Regional Integration, Scale Economies and Industry Location in the European Union' *CEPR Discussion Paper* No. 1435, July.
- Chen, Jian and Fleisher, B. (1996) 'Regional Income Inequality and Economic Growth in China' *Journal of Comparative Economics* Vol. 22: 141-164.
- Chongyi, Feng. and Goodman, D. (1997) 'Hainan: communal politics and the struggle for identity' in Goodman, D. (ed.).
- Chung, Jae Ho (1997) 'Shandong: the political economy of development and inequality' in Goodman, D. (ed.).
- Christaller, W. (1933) *Central Places in Southern Germany*, English translation by C. W. Baskin, Prentice Hall, London (1966).
- Fincher, J. (1990) 'Rural Bias and the Renaissance of Coastal China' in Linge and Forbes (eds) *China's Spatial Economy: Recent Developments and Reforms*, Oxford University Press.
- Goodman, D. (ed.) (1997) *China's Provincial Reform: Class, Community and Political Culture* Routledge, London.
- Hanson, G. (1994) 'Regional Adjustment to Trade Liberalisation' *NBER Working Paper* No. 4713, April.
- Harris, C. (1954) 'The Market as a Factor in the Localisation of Industry in the United States' *Annals of the Association of American Geographers* 64: 640-656.
- Hirschman, A. (1958) *The Strategy of Economic Development*, Yale University Press.
- Hong, Lijian (1997) 'Sichuan: disadvantage and mismanagement in the Heavenly Kingdom' in Goodman, D. (ed.).
- Hu, Dapeng (1998) 'Regional Disparity in China 1985-1994: The Effects of Globalisation and Economic Liberalisation,' unpublished manuscript.
- Jacobs, Bruce J. (1997) 'Shanghai: an alternative centre?' in Goodman, D. (ed.).
- Jian, T., Sachs, J., and Warner, A. (1996) 'Trends in Regional Inequality in China' *NBER Working Paper* 5412.
- Kato, H. (1992) 'Regional Development in the Reform Period' in *Economic Reform and Internationalisation: China and the Pacific Region*, Allen and Unwin Pty. Ltd.
- Krugman, P. (1991) *Geography and Trade*, MIT Press, Cambridge Mass.
- _____ (1995) *Development, Geography and Economic Theory*, MIT Press, Cambridge Mass.

- Krugman, P. and Venables, A. (1995) 'Globalisation and the Inequality of Nations' *Journal of Political Economy* Volume 15, Issue 4: 857-879.
- Lardy, N. (1978) *Economic Growth and Distribution in China*, Cambridge University Press.
- _____ (1992) 'China's Foreign Trade' *The China Quarterly*, September: 691-721.
- _____ (1995) 'The Role of Foreign Trade and Investment in China's economic Transformation' *The China Quarterly*, December: 1065-82.
- Lewis, W. (1954) 'Economic Development with Unlimited Supplies of Labour' *The Manchester School* 22: 139-91.
- Lin, C. (1995) 'The Assessment: Chinese Economic Reform in Retrospect and Retrospect' *Oxford Review of Economic Policy*, Vol. 11: No. 4, Winter: 1-24, Oxford University Press.
- Lin, Justin L., Fang Cai, and Zhou Li (1998) 'Competition, Policy Burdens and State-Owned Enterprise Reform' *American Economic Review* May Vol. 88, No. 2: 422-427.
- Linge, G. and Forbes, D. (1990) 'The Space Economy of China' in Linge and Forbes (eds) *China's Spatial Economy: Recent Developments and Reforms*, Oxford University Press.
- Losch, A. (1940) *The Economics of Location*, English translation by Yale University Press, New Haven (1954).
- Lyons, Thomas (1987) *Economic Integration and Planning in Maoist China*, Columbia University Press New York.
- Mao Zedong (1974) 'On the Ten Great Relationships' in Schram, S. (ed.) *Chairman Mao Talks to the People*, Pantheon, New York.
- Marshall, A. (1920) *Principles of Economics*, Macmillan Press, London.
- Montinola, G., Qian, Yingqi, and Weingast, B. (1995) 'Federalism, Chinese Style' *World Politics* Vol. 48, October: 50-81.
- Morris, D. (1995) 'The Reform of State-owned Enterprises in China: The Art of the Impossible' *Oxford Review of Economic Policy* Vol. 11: No. 4, Winter: 1-24, Oxford University Press.
- Murphy, R., Shleifer, A. and Vishny, R. (1989) 'Industrialization and the Big Push' *Journal of Political Economy* 97: 1003-1026.
- Myrdal, G. (1957) *Economic Theory and Underdeveloped Regions*, Duckworth, London.
- Naughton, Barry (ed.) (1997) *The China Circle. Economics and Technology in the PRC, Taiwan and Hong Kong*, Brookings Institution Press, Washington DC.
- Nolan, P. and Dong Fureng (eds) (1990) *Market Forces in China: Competition and Small business: The Wenzhou Debate* Zed Books Ltd. London.

- Nurkse, R. (1958) 'The Conflict between "Balanced Growth" and International Specialisation', in Meier, G. (1984) *Leading Issues in Economic Development*, Oxford University Press.
- Oi, J. (1996) 'The Role of the Local State in China's Transitional Economy' in Walder, A. (ed.) *China's Transitional Economy*, Oxford University Press, Oxford.
- Puga, D. and Venables, A. (1996) 'The Spread of Industry: Spatial Agglomeration in Economic Development' *CEPR Discussion Paper* No. 1354 February.
- Rosenstein-Rodan, P. (1943) 'Problems of Industrialisation of Eastern and Southeastern Europe', *Economic Journal*, June-September: 202-211.
- Smith, A. (1786) *An Enquiry into the Wealth and Inequality of Nations* reprinted by Penguin Classics (1986), London.
- Solinger, D. (1996) 'Despite Decentralisation: Disadvantages, Dependence and Ongoing Central Power in the Inland – the Case of Wuhan' *China Quarterly* March: 1-34.
- State Statistical Bureau (SSB) (1997) *Statistical Yearbook of China (SYC)*, China Statistical Publishing House, Beijing.
- _____ (1996) *China's Regional Economy. A Profile of 17 Years of Reform and Opening Up*, China Statistical Publishing House, Beijing.
- _____ (1996b) *The Gross Domestic Product of China*, China Statistical Publishing House, Beijing.
- Sun, J. (1988) *The Economic Geography of China*, Oxford University Press.
- Venables, A. (1996) 'The Localisation of Industry and Trade Performance' *Oxford Review of Economic Policy* Vol. 12, No. 3: 70-84, Oxford University Press.
- West, L. and Wong, C. (1995) 'Fiscal Decentralisation and Growing Regional Disparities in Rural China: Some Evidence in the Provision of Social Services' *Oxford Review of Economic Policy* Vol. 11, No. 4: 70-84, Oxford University Press.
- Wong, C. (1991) 'Central-Local Relations in an Era of Fiscal Decline: The Paradox of Fiscal Decentralisation in Post-Mao China' *The China Quarterly* 128, December: 691-716.
- World Bank (1992) *China: The Role of the Plan and the Market in the 1990s*, World Bank Country Study Report.
- _____ (1994) *China: Internal Market Development and Regulation*, World Bank Report No. 12291-CHA.
- Yang, D. (1990) 'Patterns of China's Regional Development Strategy' *The China Quarterly* 122(2): 230-57.

_____ (1997) *Beyond Beijing. Liberalization and the Regions in China*, Routledge New York.

Yao, Shujie (1997) 'Industrialisation and Spatial Income Inequality in Rural China, 1986-92' *Economics of Transition*, Volume 5(1): 97-112.

Young, A. (1928) 'Increasing Returns and Economic Progress' *Economic Journal* 38: 527-542.

Zhao, X. (1995) 'Spatial Disparities and Economic Development in China' *Development and Change*, Volume 27, January: 131-63.

Zhao, X. (1987) 'Documents of the Thirteenth National Congress of the Communist Party of China' Foreign Languages Press, Beijing.

Zheng, Yongnian (1998) 'The Chinese Way of Governing Provinces: *De Facto* Federalism in the Post-Deng Era.' Paper presented at An International Conference on The PRC After the Fifteenth Party Congress: Reassessing the Post-Deng Political and Economic Prospects, February 19-20 1998, Taipei.

Research in Progress RIP
UNU/WIDER's in-house publication series

- RIP1** Transition and Income Distribution: Theory, Evidence and Initial Interpretation by Giovanni Andrea Cornia, March 1996
- RIP2** The Liberalization of Food Marketing in Sub-Saharan Africa by Pekka Seppälä, September 1996
- RIP3** The Distribution of Assets in Transitional Economies by Juha Honkkila, October 1996
- RIP4** Labour Market Shocks, Psychosocial Stress and the Transition's Mortality Crisis by Giovanni Andrea Cornia, October 1996
- RIP5** Humanitarian Emergencies: Indicators, Measurements, and Data Considerations by Helinä Melkas, October 1996
- RIP6** Financial Repression, Interest Rates, and Credit Allocation in Sub-Saharan Africa by Michael Graham, October 1996
- RIP7** A Review of Social Policy Implementation in Nigeria with Emphasis on Education by Daniel Edevbaro, October 1996
- RIP8** Sharing in Community-based Social Services in Rural Tanzania: A Case Study of Mtwara and Lindi Regions by Marja-Liisa Swantz, October 1996
- RIP9** Impoverishment, Food Consumption and Health in Central and Eastern Europe during the Transition by Renato Panicià, October 1996
- RIP10** Provision of Public and Merit Goods: Towards an Optimal Policy Mix? by Reino Hjerpe, February 1997
- RIP11** Poverty Alleviation during the Transition in Rural China by Zhu Ling, April 1997
- RIP12** A Review of Welfare Changes in Asian Transitional Economies by Lu Aiguo, April 1997
- RIP13** The Investment Decline in Transition Economies: Policy versus Non-Policy Factors by Vladimir Popov, May 1997
- RIP14** Short- and Long-Term Determinants of Cardiovascular Mortality: An Econometric Assessment of the Working Age Population in Russia, 1965-95 by Renato Panicià, June 1997
- RIP15** War, Hunger and Flight: The Political Economy of Humanitarian Emergencies by E. Wayne Nafziger and Juha Auvinen, June 1997
- RIP16** Water and Third World Cities: The Expanding Puzzle by Olli Varis, February 1998
- RIP17** Budgetary Institutions and Fiscal Consolidation in Ghana: Lessons for Transition Economies in Africa by Anthony Tsekpo, September 1998
- RIP18** Rebuilding Post-Conflict Africa: Reconstruction and Reform by Tony Addison, November 1998
- RIP19** The Change of the Financial System and Developmental State in Korea by Kang-kook Lee, February 1999
- RIP20** Regional Development and Government Policy in China's Transitional Economy by Jane Golley, April 1999

UNU/WIDER Publications
Katajanokanlaituri 6 B
00160 Helsinki, Finland

Telephone (+358-9) 6159911
Telefax (+358-9) 61599333
E-mail wider@wider.unu.edu
<http://www.wider.unu.edu>