

# **Chinese Cities and China's Development**

## *A Preview of the Future Role of Hong Kong*

*edited by*

Anthony Gar-On YEH  
Centre of Urban Planning and Environmental Management  
The University of Hong Kong

and

Chai-Kwong MAK  
University Graduates Association of Hong Kong



Centre of Urban Planning and Environmental Management  
The University of Hong Kong  
1995



# **Chinese Cities and China's Development**

## *A Preview of the Future Role of Hong Kong*

© Centre of Urban Planning and Environmental Management,  
University of Hong Kong, 1995

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the prior permission of the publisher.

Published by  
Centre of Urban Planning and Environmental Management  
University of Hong Kong  
Pokfulam Road  
Hong Kong

ISBN 962-7589-06-3

Printed by New Man Wah Printing Co., Ltd.  
Typesetting by Azet Typesetting Co., Ltd.

# FOREWORD

A.G. Eason

*Former Secretary for Planning, Environment and Lands,  
Hong Kong Government*

The overall theme of the monograph -- "Chinese Cities and China's Development" -- is a wide open one, in the geographical, economic and subject scope senses. The first question is therefore: where to start? And the answer must be: Hong Kong !

The Asia-Pacific region has now become and will continue to be the fastest economic growth area. It is a commonly held view that China could be one of the leading economic nations by the middle of the next century or even earlier. By then, Hong Kong could be the most prosperous Chinese city, an amalgam of New York, London, Amsterdam and Venice at the height of their trading powers, richer perhaps than any city on earth has ever been before. I am no fortune-teller, nor do I have a crystal ball in hand. But, the discussions in this monograph have explored in considerable depth China's present as well as future development and the role Hong Kong can play.

Turning to the central theme of this monograph - "A Preview of the Future Role of Hong Kong", let us think for a moment about the role Hong Kong plays now before we try to preview its future role. Better still, let us first travel back in time, if we may, and take a glimpse at Hong Kong a hundred years ago.

The first Hong Kong Guidebook was published by Kelly and Walsh in 1893. Its introductory chapter contains the following descriptive passage:

*"From its position on the south-eastern shores of the continent of Asia and the great Chinese Empire, its roads and buildings constructed at enormous cost, owing to the steep and rocky nature of the ground; the variety of its inhabitants from all quarters of the globe; its magnificent land - locked harbour, and its reliance for its very existence upon the shipping which is continuously entering the harbour from the principal countries and ports of the world - Hong Kong is of surpassing interest ... and its influence upon the future of the neighbouring Empire ... is difficult, if not impossible to foretell"*

It seems that while everything is changing, many things are staying same!

Those few sentences written in 1893, neatly sum up much of what I am going to say and illustrate that there are certain basic permanent features which made Hong Kong what it was in the beginning, make Hong Kong what it is today, and will sustain Hong Kong far into the future.

Now let us take a close look at Hong Kong today. Despite its minute size by any standards, Hong Kong is one of the world's most successful communities. A few indicators -

*First*, during the past decade, Hong Kong's annual real GDP growth has been 6.5%, the corresponding rate for OECD countries was 3%;

*Second*, Hong Kong's per capita GDP was over US\$16,000 in 1992. This is among the highest in Asia; only lower than Japan, but about the same level as Singapore;

*Third*, Hong Kong is the world's tenth largest trading economy, although it ranks only 89th in terms of population;

*Fourth*, Hong Kong's container port has the highest throughput in the world. Our airport is the world's third and fourth busiest airport in terms of international cargo and passengers respectively;

*Fifth*, alongside China, Hong Kong is Asia's most popular tourist destination;

*Sixth*, Hong Kong is a major business and financial centre ranking fourth in terms of the volume of external banking transactions, and sixth in terms of foreign exchange transactions. It is also probably one of the four largest gold markets in the world. Its stock market by market capitalization is the second largest in Asia;

*Seventh*, Hong Kong is one of the most favoured regional headquarters for multinational corporations serving as the gateway to the enormous but relatively unexplored China market.

I could go on and on adding to this list. But my point is that Hong Kong has come a long way. Its position is a result of a number of factors - including hard work and a degree of smiling fortune - but let me mention a few of the others:

*First*, physical factors and geography. Hong Kong is at the crossroads of

Asia and the Pacific and by far the best natural port on the South China coast. It is therefore positioned to take full advantage of opportunities as they arise;

*Second*, the human factor. Our people are well known for their vitality, diligence and adaptability. Their natural resilience, flexibility and determination to succeed made Hong Kong people into one of the most enterprising societies;

*Third*, institutional factors. As a result of the unique mix of western and eastern culture as well as learning and discipline, Hong Kong has created excellent legal and accounting systems and services of a high international standard, providing a convenient mix of professionalism and expertise unrivalled around in the world. Hong Kong also has a first rate civil administration, efficient transportation and telecommunications networks, low taxation, a supportive but not heavy handed government and explicit rules of the game for all.

All these key elements and ingredients of Hong Kong's systems will remain beyond 1997. This is clearly laid down in the Sino-British Joint Declaration. The Government is busy building for Hong Kong's future by putting in place all the essential infrastructure to ensure her continued development and success. Our plans for the new airport, the container port and key transport projects as well as our enormous investments in human resources through education, and other social programmes are in China's as much as Hong Kong's interest. Our people must be equipped to meet the challenges of tomorrow.

It is my belief that the fundamental constants which have made Hong Kong tick up until now will shape its future beyond 1997. Hence, my confidence in our continued success. In particular, I think Hong Kong can play the following important role in furthering China's development in the next century.

*First*, as the key gateway into China for multinational corporations and a bridge for China to do business with them;

*Second*, as a key trading, commercial and financial centre on its own right and at the same time a key contributor to the economic development of China, in particular Southern China;

*Third*, as a training ground for Chinese personnel and professionals in

international trade and commerce;

*Fourth*, as an experimental ground for new ideas, and a pace and trend-setter. This may stretch through scientific and technical services, banking and business, higher education, tourism and fashion etc.;

*Fifth*, as the key international port and a leading airport for China;

*Sixth*, as the favourite city for Chinese visitors and shoppers; and

*Seventh*, a most exciting cultural centre with both a Chinese and a western flavour.

It is stating the obvious today that Hong Kong has an inseparable relationship with China in the long run. Its continued success, to a great extent, depends on China. The broad direction of China's development now seems irreversible. Hence, my firm belief in Hong Kong's continued success.

December 1995



# Contents

Foreword by A. G. Eason	v
Table of Contents	ix
List of Figures	xii
List of Tables	xiii
Contributors	xvi
Preface	xxvii

## INTRODUCTION

1	<b>Urban China: Looking Forward, Looking Back</b>	3
	<i>Andrew HAMER</i>	

## CHINA'S DEVELOPMENT INTO THE NEXT CENTURY

2	<b>Some Issues of China's Long-Term Economic Development</b>	29
	<i>Jian WANG</i>	
3	<b>Taiwan's Overall Development Plan into the Next Century</b>	43
	<i>Len-Kuo HU</i>	
4	<b>Hong Kong's Economic Prospect in a Changing Relationship with China - A Speculative Essay</b>	91
	<i>Shu-Ki TSANG</i>	

## NATIONAL URBAN POLICY AND URBANIZATION TRENDS IN CHINA

5	<b>Large Cities versus Small Cities - The Debate</b>	115
	<i>Yixing ZHOU</i>	
6	<b>The Urban Agglomeration of China</b>	137
	<i>Shimou YAO</i>	
7	<b>Urbanization Trend in China - Coastal, River, and Interior Cities in China's Development</b>	149
	<i>Anthony Gar-On YEH</i>	

## **FUTURE DEVELOPMENT OF CHINESE CITIES**

- |    |  |     |
|----|--|-----|
| 8  | <b>Increase of Urban Floating Population and Transfer of Rural Labour</b><br><i>Meng-Bai LI</i>                    | 185 |
| 9  | <b>The City and the City's Infrastructure</b><br><i>Guangtao WANG</i>  | 197 |
| 10 | <b>China's Cities, Striding into the New Century - Some Hard Thinking Done by Urban Planner</b><br><i>Deci ZOU</i> | 211 |

## **CHINESE CITIES IN THE REGIONAL DEVELOPMENT CONTEXT**

- |    |  |     |
|----|--|-----|
| 11 | <b>Development Prospect of North-China's Coastal Region and Beijing-Tianjin Conurbation</b><br><i>Shunzan YE</i> | 225 |
| 12 | <b>Development of Shanghai and the Yantze Delta</b><br><i>Gonghao CUI</i>  | 241 |
| 13 | <b>Wuhan - An Economic Centre of China's Interior Land in the 21st Century</b><br><i>Guangjie LIU</i>            | 255 |
| 14 | <b>Industrialization and Urbanization in the Pearl River Delta Region</b><br><i>Xueqiang XU and Rong ZHANG</i>   | 261 |
| 15 | <b>Taipei's Role in the Regional Development of China</b><br><i>Jing-Huei HWANG</i>                              | 277 |
| 16 | <b>Hong Kong's Territorial Development Strategy</b><br><i>Bosco FUNG</i>   | 295 |

## **HONG KONG AND CHINA'S DEVELOPMENT - BUILDING TANGIBLE LINKS**

- |    |   |     |
|----|---|-----|
| 17 | <b>Kwai Chung - China's World Port?</b><br><i>Tony CLARK</i>  | 313 |
| 18 | <b>Inter - and Intra - Regional Railway Links - Railways and China's Deep Hinterland</b><br><i>Kevin HYDE</i> | 321 |
| 19 | <b>Aviation Relations Between Hong Kong and China After 1997</b><br><i>Howard YOUNG</i>                       | 329 |

20	<b>Hong Kong and China's Telecommunications Network</b> <i>John URE</i>	335
----	--	-----

**HONG KONG AND CHINA'S DEVELOPMENT - DISMANTLING  
INTANGIBLE BARRIERS**

21	<b>Hong Kong and China - Regional and Economic Integration</b> <i>George SHEN</i>	345
22	<b>China's Banking Development</b> <i>Antony LEUNG</i>	357
23	<b>Trade and Tourism Links Between China and Hong Kong - Building Synergy for Competitive Advantage</b> <i>Martin BARROW</i>	365
24	<b>Some Observations of the Legal System, Standards and Practices in a Socialist Market Economy</b> <i>University Graduates Association of Hong Kong</i>	373

## List of Figures

3-1	Proportion of Domestic GNP by Sector	79
6-1	Major Urban Agglomeration Areas in China	138
7-1	Special Economic Zones, Coastal Open Cities and Open Economic Regions of China	155
7-2	Regional Distribution of Foreign Direct Investment in China, 1988-91	158
7-3	Regional Growth of Foreign Direct Investment in China, 1988-91	159
7-4	Urbanization of China 1949-89	162
7-5	Composition of City and Town Population 1970-89	163
7-6	Regional Variation of Urbanization Level in China, 1990	164
7-7	Regional Variation of Increase in Urbanization Level in China, 1985-90	165
7-8	Changes in City Size Distribution, 1978-90	166
7-9	Urban Clusters in China	168
9-1	Outputs and the Number of Cities Over the Years	198
11-1	Major Cities and Mineral Deposits in Bohai-Sea Rim Areas	233
12-1	The Yangtze Delta	242
14-1	Non-Agricultural Population and Gross Industrial Output Value Over the Years	264
14-2	Pearl River Delta Open Economic Zone	269
15-1	Taiwanese Investment Programming	288
15-2	Export of Finished Products	292
15-3	Import of Raw Materials	293
15-4	Process in the Second Stage	294
16-1	Simplified TDS Review Process	297
16-2	Territorial Development Strategy Review: Regional Context	299
16-3	Territorial Development Strategy Review: Potential Strategic Growth Areas	307
16-4	Territorial Development Strategy Review: Major Road and Railway Network	308

## List of Tables

2-1	Proportion of Production Sector in Different Periods	29
2-2	Growth Rates of Light and Heavy Industry in Different Periods	31
2-3	Proportional Distribution of Foreign Investment by Regions along the Coast	38
3-1	Estimation of the Approximate Take-off Year	46
3-2	Gross Domestic Savings in Selected Asian Countries (% of GDP)	47
3-3	Taiwan's Production Growth and Its Structural Change	49
3-4	Structural Change in Manufacturing (Sharing in Manufacturing Value Added %)	50
3-5	Merchandise Exports and Its Composition (Annual Average)	52
3-6	Composition of Manufactured Exports (Annual Average)	53
3-7	External Resources: Private Foreign and Overseas Chinese Investment and U.S. Aid by Year	54
3-8	Approved Private Foreign and Overseas Chinese Investment by Industry (1952-1992)	55
3-9	Taiwan's Trade Development and Its Bilateral Relation	59
3-10	The Development of Indirect Trade Between Mainland China and Taiwan via Hong Kong (1979-1992)	61
3-11	Revised Macroeconomic Targets	83
5-1	R's Values of Different City Sizes in the Three Regions of China in 1985 and 1986 (Yuan/100 Yuan RMB)	122
5-2	Comparison of Investment and Output in Different City Sizes in 1985	123
5-3	Annual Natural Population Growth Rate in Different City Sizes in 1980 and 1991	127
5-4	Correlation Coefficients Between NIOV, Per Capita (Y1), Per Industrial Employee (Y2) and City Size (X)	127
5-5	Standard Regressions Coefficient of NIOV and APTP with Seven Causal Factors in Three Regions in Chinese Cities in 1984	128
5-6	Standard Regression Coefficient of NIOV with Seven Causal Factors in Three Regions	129
5-7	Examples of Selected City Plans Which Artificially Reduce the Size of the Planned Population	130
5-8	Comparison of Average Annual Growth Rate of Urban Population (AAGR) Between 1964-80 and 1980-89	131
6-1	Population Change of Primary Cities in China's Urban Clusters (Unit: 10,000)	140

6-2	Three Large Urban Clusters in the Eastern Coastal Region of China	143
6-3	Industrial Structure in Shanghai-Nanjing-Hangzhou Area (Unit: %)	145
7-1	Major Foreign Investors in China, 1989	157
7-2	Types of Employment in City Proper in Economic Reform Cities, Coastal Open Cities and Special Economic Zones, 1989	171
7-3	Average Foreign Direct Investment by City Size and Region 1988 and 1990	172
7-4	Foreign Direct Investment in Cities (in US \$1,000) by Region, 1990	173
7-5	Foreign Direct Investment in Cities (in US \$1,000) By City Size, 1990	173
7-6	Top Twenty Cities in Foreign Direct Investment, 1990	174
7-7	Distribution of the Source of Foreign Direct Investment in Shenzhen and Shanghai, 1985-89	175
8-1	Total Floating Population by Year in Ten Major Cities	186
8-2	Classification of Floating Population in Ten Major Cities	188
9-1	Utility and Infrastructure Development, 1949-1978	204
9-2	Utility and Infrastructure Investments, 1949-1978	205
9-3	Current and Planned Levels of Utility and Infrastructure in Year 2000	206
12-1	Growth Rate of Industrial Product in Selected Provinces	243
12-2	Spatial Distribution of National Investments on Capital Works According to FYPs (%)	244
12-3	Change of Position of Industrial Product of Coastal Regions (%)	244
12-4	Contrast Between Per Capita National Income of City Proper and Suburb County	251
14-1	Annual Growth Rates of Main Economic Indicators Between 1980 and 1991	262
14-2	Correlation Coefficients Matrix	265
14-3	Growth Rates Per Year of Main Economic Indicators in the Pearl River Delta Between 1980 and 1991	267
14-4	Proportion of Gross Industrial Output Value in Total Social Output Value in Cities	270
14-5	Town Size in Dongguan, Nanhai, Shunde and Zhongshan in 1990	273
15-1	List of View Points on Chinese Economic Circle	278
15-2	Taiwan's Export to Hong Kong	279
15-3	Taiwan's Export to ASEAN Countries	280
15-4	Mainland China's Export/Import to Hong Kong	281

15-5	Taiwan's Export/Import to Mainland China	281
15-6	Export/Import of Mainland China (1987 -1992)	282
15-7	Taiwan's Foreign Investment	283
15-8	Taiwan's Export and Import (1987 - 1993.6)	285
15-9	Major Commodities Exported to ASEAN from Taiwan	285
15-10	Major Commodities Exported from Taiwan to Mainland China	286
15-11	Taiwan's Top 14 Industries Invested in Mainland China as at April 1991	289
15-12	Taiwan's Top 10 Industries Invested in Mainland China as at June 1993	289
15-13	U.S. Tariff on China's Top 15 Export Commodities	290
15-14	Commodities of Larger Export Growth in China, 1991	290
16-1	Framework for Generating TDS Options	301
16-2	Forecast Range of Demand for Major Land Use for the Period 2001-2011	304
20-1	China's National Public Telephone Network	336
20-2	Key Targets for the Public Switched Network	338
21-1	GDP Shares and Employment - Manufacturing and Service Sectors	347
21-2	Value of Re-Exports to Major Markets (HK\$ billion)	348
21-3	Summary of China's Investment in Hong Kong's Listed Companies	352
24-1	Different Types of Political-Economic System	374
24-2	Recent Amendments to the Economic Contract Law (1982)	380
24-3	Revised Analytical Framework	383
24-4	Hong Kong's Re-Exports to China and of China's Origin	383

## **Contributors**

### **Martin BARROW**

Martin Barrow joined Jardine, Matheson & Co. Ltd. in 1965 and worked in Hong Kong, Japan and Thailand before being appointed Managing Director of the Company's Branch in Japan in 1976. He was made a Director of Jardine, Matheson & Co., Ltd in 1980. He then worked in Saudi Arabia until 1983 when he returned to Hong Kong as Regional Managing Director responsible for Jardines' operations in Hong Kong and China. Following restructuring of the Group in 1989, he was appointed Deputy Chairman of the Asia-Pacific Regional Board of Jardine Matheson Holdings Ltd.

In 1979, he was appointed an Officer of the Order of the British Empire (OBE) in recognition of his service to trade between the United Kingdom and Japan. In 1988, he was appointed a member of the Legislative Council of Hong Kong. Mr. Barrow holds directorships of many companies and performs various civic duties including Chairman of the Hong Kong Tourist Association, Member of the Trade Development Council, Member of the Aviation Advisory Board, Chairman of the Trade Committee of the Hong Kong/Japan Business Co-operation Committee etc.

### **Tony CLARK**

Tony Clark is Secretary for the Hong Kong Port Development Board. A career civil servant and Administrative Officer, Mr. Clark joined the Hong Kong Government in 1964. He has served in a number of Government departments and in most branches of the Government Secretariat. He has been associated with Hong Kong's shipping and port policies since 1985.

He was responsible for separation of Hong Kong's shipping register from the parent British Register and devising, in consultation with the local shipping community and the governments of Hong Kong, the UK and China, standards to be adopted in the autonomous Register of Hong Kong Ships. He was subsequently responsible for setting up the Hong Kong Port Development Board. The Board advises the Governor on the development needs of the port of Hong Kong. He now heads the Board's secretariat. He is concurrently Deputy Secretary for Economic Services of the Hong Kong Government dealing with shipping and port policy.



### **Gonghao CUI**

Professor Cui's education and academic career has been closely related to Nanjing University. After graduating from the Nanjing University in 1956, Professor Cui has been involved in a wide range of research work covering the urban systems in the Jiangsu, Shandong, Hunan and Hubei provinces, the characteristics and layout of Chinese cities, the regional planning of Yichang Prefecture in Hebei Province and studies on the megalopolis along the middle and lower reaches of the Yangtze River.

Currently, Professor Cui is a Councillor to the Committee on Economic Geography of the Geographical Association of China, a Councillor of the Urban Planning Society of China and Vice-President of the Nanjing Society of Urban Studies. Professor Cui has published numerous papers and reports and is the author/co-author of four books.

### **Bosco C. K. FUNG**

Bosco Fung is a Government Town Planner in the Planning Department of the Hong Kong Government. An urban geographer and town planner by origin, he has worked in the Planning Department of Hong Kong since 1975 and has been engaged in a wide range of planning activities, from district and new towns planning, statutory planning, ordinance review to territorial strategic planning. Currently, he heads a Division in the Planning Department and is responsible for reviewing the Territorial Development Strategy, Sub-regional Plans, and Port Development Strategy of Hong Kong. Mr. Fung has also been closely involved with the Hong Kong Institute of Planners. He was the President of the Institute in 1993.

### **Andrew HAMER**

Dr. Hamer is the Principal Sector Economist of the Environmental and Urban Operations Division, China and Mongolia Department, The World Bank. Dr. Hamer has been responsible for urban sector work and sector strategy. He prepared two Red Cover sector reports on urban housing reforms and urban land management and participated in the preparation of the Housing and Social Security Reform Project. He has carried out extensive research into China's contemporary urban and economic development and presented papers at the International Workshops on Economic Development in Shanghai (1991) and Tianjin (1992).

Dr. Hamer received his M.A. and Ph.D. in Economics from Harvard University in 1969 and 1972 respectively and has been with the World Bank since 1978. He has published important papers and articles concerning

urbanization in developing countries including "Four Hypotheses Concerning Contemporary Chinese Urbanization" (1990), "Urbanization in the Less Developed World : Patterns, Issues, and Policies" (1987) and "Decentralized Urban Development : Stylized Facts and Policy Implication" (1987). He is also the author/co-author of a number of books about China's urbanization and economic development, such as China: Urban Land Management in an Emerging Market Economy (1993), China: Implementation Options for Housing Reform (1992) and China: Zhejiang: Challenges of Rapid Urbanization (1987).

### **Len-kuo HU**

Professor Hu is Associate Professor in the Graduate Institute of International Trade of the National Chengchi University. His work in Taiwan's Foreign Trade Policy and the internationalization of Taiwan's enterprises has provided important contributions to the understanding of Taiwan's economic development into the next century.

A graduate of the National Taiwan University in 1976, Professor Hu obtained his M.A. and Ph.D. in Economics in the University of California at Los Angeles in 1982 and 1984 respectively. Between 1984 and 1989, Professor Hu carried out economic research and analyses at UCLA and the Southern California Gas Company. Lately, he received grants from the Energy Commission of the Ministry of Economic Affairs and National Science Council and carried out research on the "Future of Taiwan's Oil Industry" (1991-92), "Optimal International Portfolio and Currency Hedge Strategy" (1991-92) and "Imperfect Competition and Strategic Trade Policy" (1992-93).

### **Jing-huei HWANG**

Professor Hwang is the Professor of the Department of Information Management, Fu Jen University, Taipei.

After graduating from the National Chengchi University in Business Studies, Prof Hwang started his career in economic analyses and researches. He worked consecutively in the Economic Divisions of the Taiwan Embassies in the United States, Vietnam and Manila. He completed a Ph.D. programme in Management in the Santo Thomas University in the Philippines. After returning to Taiwan, he has been the Head of the Computer Centre of Ching Yee College and Associate Professor of Chengchi University and Yiaotong University when he concentrated his research interests in information technology. In 1980, Professor Hwang joined Fu Jen University and has carried out extensive research on Taiwan's investments in Mainland China.

### **Kevin HYDE**

Kevin Hyde was appointed Chairman of the Kowloon Canton Railway Corporation in 1990. He obtained a law degree at Victoria University, Wellington and undertook an Advanced Management Programme at Harvard University. He has held various senior posts in the N.Z. Railways Corporation and was appointed to the position of Chief Executive Officer in 1987.

He is a Fellow of the Chartered Institute of Transport, the New Zealand Management Association and the Hong Kong Management Association. He is also a member of the Executive Committee and Council of the HK Management Association, a Board Member of the Chartered Institute of Transport in Hong Kong, the Vocational Training Council and the Academic Advisory Committee for the Diploma in Transport Management at Hong Kong University.

### **Antony LEUNG**

Antony Leung is the Country Corporate Officer for Citibank Hong Kong. Mr. Leung is also Head of Global Finance, the Bank's wholesale banking business, for Hong Kong and the People's Republic of China. Concurrently he is Division Executive for North Asia Investment Banking activities, covering Hong Kong, the People's Republic of China, Taiwan, Korea and the Philippines. Mr. Leung has been with Citibank for 20 years. He joined the Bank in Hong Kong and has held various management positions with the corporate bank and the investment bank in Hong Kong, New York, Singapore and Manila.

For civic duties, he is currently involved in the following government committees: Chairman of the University and Polytechnic Grants Committee, member of the Exchange Fund Advisory Committee and member of the Board of the Provisional Airport Authority. He is also a member of the Board of the Hong Kong Community Chest. He was a member of the Board of the Hong Kong Futures Exchange from 1987 to 1990, and a part-time member of the Central Policy Unit of the Government from 1992 to 1993. A graduate of the University of Hong Kong in 1973, majoring in Economics and Statistics, Mr. Leung also completed a Management Development Programme at the Harvard Business School in 1982.

### **Meng-bai LI**

Professor Li is an Advisor and Professor of Legislative Affairs in the Ministry of Construction, China.

After completing his Bachelor degree in Chinese language literature,

economics and sociology, Professor Li started working in 1951 and progressively held the posts of Deputy Director of National Construction Committee Policy Studies Office, the Director of the Institute of Urban and Rural Development in the Ministry of Construction, and Director of the Policy Studies Office of the Department of Policy and Regulation in the Ministry of Urban and Rural Construction and Environmental Protection Secretary. He was also the Director of the Chinese Institute of Urban and Rural Economic Development, Professor of the Institute of the Wuhan Urban Construction and Director of China Sociology for Urban Studies and China Society for Economic Law Studies.

### **Guangjie LIU**

Professor Liu is the Professor of Economics at Wuhan University and the Vice Chairman of the Economics Association of Hubei Province. He has been a faculty member of the Department of Economics of the Wuhan University since his graduation in 1954. Between 1956 to 1959, he attended the graduate class of economics of the People's University of China and from 1984 to 1986, he was the Deputy Director of the Academy of Social Sciences of Hubei Province. Since 1990, Professor Liu has been the doctoral Adviser of Wuhan University and also the Presiding Member of the Chinese Society of Logistics Management.

### **Chai-kwong MAK**

Mak Chai-kwong is a chief engineer in the Highways Department of the Hong Kong Government. He joined the Government in 1973 and has been closely involved in the planning, design and development of the railway system in Hong Kong. He received his B.Sc.(Eng) from the Hong Kong University in 1973 and his M.Sc.(Urban Planning) from the same University in 1985. He also completed an Administrative Development Programme at the University of California at Berkeley in 1990.

Mr. Mak has been an active member of the University Graduates Association of Hong Kong. He was the President of the Association in 1985 and 1986 and currently a member of the Association's Executive Committee.

### **George SHEN**

Prior to joining the Hong Kong Economic Journal, Dr. Shen worked with the Asian Productivity Organization (APO). Between 1968 and 1986, he was the Head of Administration and Public Relations of APO's Tokyo Office when he was actively involved in planning and implementing its programmes and

making direct contributions to the productivity improvement and economic development of the region. He has written many articles on management and economic development and his publications include "Better Human Relations" (1969), "Productivity Measurement and Analysis" (1983), "Essays on China's Economy" (1989) and "My View of Japan" (1990). He also translated into Chinese the book "Drucker : The Man Who Invented the Corporate Society" which was published in Hong Kong (1984) and Beijing (1985).

Dr. Shen received his B.A. from St. John's University, Shanghai in 1949 and his M.B.A. and Ph.D. in the United States. He is a Fellow of the Institute of Management of the United Kingdom. His name was included in the 8th, 10th and 11th editions of "Who's Who in the World". Between 1990 and 1992, he served as a part-time member of the Central Policy Unit of the Hong Kong Government. He is Chairman of the Course Advisory Committee for Language Studies, the City Polytechnic of Hong Kong.

### **Shu-ki TSANG**

Dr. Tsang is Associate Professor in the Department of Economics of the Hong Kong Baptist University. After graduated from the Hong Kong University with a B.A. in western philosophy and political science, Dr. Tsang quickly developed his interests in the contemporary affairs of China and Hong Kong. After completing an M.B.A. programme at the Chinese University in 1978, he worked as a credit analyst, a dealer and a treasury assistant in Hong Kong before going abroad for further studies. He obtained his M.A. and Ph.D. in Economics at the University of Manchester in 1982 and 1990 respectively and before he joined the Hong Kong Baptist College in 1985, he was an economist with the Standard Chartered Bank when he witnessed the Hong Kong Dollar crisis in 1983-84.

Dr. Tsang had carried out extensive research on a wide range of topics about Hong Kong and China. He is the author/co-author of four books and a number of academic papers. In 1986-89, he was an invited editor of the reformist journal Young Economists Forum published in Tianjin. He is now an External Research fellow of the Institute of Asian-Pacific Studies based in Guangzhou. He has been a Part-Time Member of the Central policy Unit of the Hong Kong Government since 1991 and a Member of the Hong Kong Research Grant Council since January 1993.

### **John URE**

Dr. Ure is the Project Director of the newly created Telecommunications Research Project at the Centre of Asian Studies. Before coming to Hong Kong

in 1989 as a Research Associate of the Centre of Asian Studies, Dr. Ure was Senior Lecturer in Economic at the North East London Polytechnic (now the University of East London) where he co-authored a two-volume course textbook, "Background to Modern Economics and Modern Economic Thought".

His interest in the economics of technological change led him into the study of the modern telecommunications industry, and since arriving in Hong Kong he has given many papers on this subject. Dr. Ure also teaches part-time on the MBA programme and in the Business Studies Department of the University of Hong Kong.

### **Guangtao WANG**

Professor Wang is the Director of the Department of Urban Construction, Ministry of Construction. After graduating from Tongji University in Urban Construction, Professor Wang started his career in the Department of Construction and the Xuzhou City Production Headquarters in Jiangsu Province. In 1981, he obtained his M.Sc. from Tongji University specializing in Road and Traffic Engineering. He then progressively worked as Engineer, Division Chief, Deputy Engineer General and Deputy Director of the Commission for the Xuzhou Construction Commission. He became the Vice-Mayor of Xuzhou City in 1984 and, since 1989, he has been associated with the Ministry of Construction.

### **Jian WANG**

Professor Wang is the Deputy Director of the Institute of Economics in the State Planning Commission, China.

He received his Ph.D. from the Beijing University majoring in Development Economics. After graduating from the Central Institute of Finance in 1982, he actively participated in the formulation of a number of policy proposals for China's economic development and reform. He was well known for his proposal on 'China's Coastal Development Strategy' which had aroused much attention at home and abroad. In 1992, he was awarded the honour of Specialized Expert by the State Government for his distinguished contributions. Recently, his main research efforts are focused on the regional disparities between China's coastal and interior regions.

### **Xueqiang XU**

Professor Xu is the Commissioner of the Higher Education Commission of Guangdong Province and Professor of the Department of Geography,

Zhongshan University.

After graduating from Zhongshan University in 1963, Professor Xu spent most of his academic career in teaching and research in the field of economic geography and regional development. He is an expert in the development and urbanization of the Pearl River Delta region. He has published vast number of academic papers and is the author/co-author of 6 books. Professor Xu is also the doctoral supervisor in the Department of Geography of Zhongshan University, Vice-President of the Geographical Association of China and Chairman of the Geographical Association of Guangdong Province.

### **Shimou YAO**

Professor Yao is the Director of the Department of Economic Geography of the Nanjing Institute of Geography and Limnology. After graduating from the Zhongshan University in 1964, Professor Yao had extensive international experience through academic exchanges. He was a member of the Chinese Geography Delegation to the United States in 1978. In 1983-84, sponsored by the Luce Foundation, he was appointed a Visiting Scholar in the Asian Studies Centre of Michigan State. Since then, he has visited no less than 16 universities in the United States, Canada, Japan, Germany and Hong Kong where he lectured on various topics of economic geography and regional development. He is currently a Corresponding Member of the International Geographic Union Commission, a Delegate to the State Urban Planning Commission and the Urban Planning and Urban Technology Commission of Jiansu Province.

Professor Yao's research interests are in the economic and urban development of large cities in China. He has published numerous papers and articles and is the author/co-author of seven books.

### **Shunzan YE**

Professor Ye is the Head of the Department of Urban and Human Geography of the Institute of Geography, China Academy of Sciences, State Planning Commission. After graduating from the Department of Land-use planning in Karkov State Agricultural University in USSR in 1961, Professor Ye started his career in teaching in the Department of Agricultural Economics of the Heilongjiang Agricultural University. Between 1980-81, he completed a programme in the Department of Urban Survey of the International Institute for Aerospace Survey and Earth Sciences, the Netherlands.

Since 1962, Professor Ye has taken up research work in the Institute of Geography in the fields of urban and regional development, urbanization,

agricultural regionalization and land use planning covering vast areas in many provinces in the northern and south-western regions of China. He has published many papers and reports on China's urbanization and regional development.

### **Anthony Gar-On YEH**

Dr. Yeh is the Assistant Director and Reader of the Centre of Urban Planning and Environmental Management, University of Hong Kong. He specializes in the urban development and redevelopment in Hong Kong, China, and S.E. Asia, and the applications of geographic/land information systems in urban and regional planning.

He is at present Secretary-General of the Asian Planning Schools Association, Programme Director of the Geographic/Land Information Technology Programme of the Commonwealth Association of Planners, and Commission Member of the Geographic Information System Commission of the International Geographic Union. He is honorary professor and research fellow of Zhongshan University, Tongji University, Guangzhou Institute of Geography, and the National Laboratory of Resources and Environment Information System of the China Academy of Science. He has been Chairman of the Hong Kong Geographical Association, Vice-President of the Hong Kong Institute of Planners, Vice-President of the Commonwealth Association of Planners and consultant to Pudong Development in Shanghai.

He has written many articles on urbanization and urban development in China and is the author/co-author of "Special Issue of Asian Geographer on Spatial Development in the Pearl River Delta" (1989), "Reference Materials on Urban Development and Planning in China" (1990), and "Chinese Urban Reform - What Model Now?" (1990).

### **Howard YOUNG**

Howard Young joined the Swire Group in 1968 after studying in UK. He has held positions in Shipping, Travel and China Trade within the Group including being stationed in China from 1986 to 1989. He was appointed by the Swire Group to Cathay Pacific Airways Ltd. as General Manager, Hong Kong in end 1989 and then General manager, industry and Hong Kong Affairs in 1992.

Mr. Young was elected to the Legislative Council by the Tourism Functional Constituency in September 1991. He is the Convenor of the Legislative Council Panel on Recreation and Culture and Vice Chairman of the Sports Development Board of Hong Kong. He is also a member of the Country Parks Board, Outward Bound Trust, Vocational Training Council of



Hong Kong, and Advisory Committee of the Department of Hotel and Tourism Management of the Hong Kong Polytechnic University.

### **Yixing ZHOU**

After graduating from the Department of Geography of Beijing University in 1964, Professor Zhou started his career as a teacher in the same Department of Beijing University. In the years that followed, he worked progressively as lecturer, Associate Professor and was appointed Professor in 1991. Between 1992 and 1993, he was Visiting Scholar in the Department of Geography at University of Minnesota, USA.

Professor Zhou has researched extensively on China's urban systems, China's urban growth policy and urban climate in Beijing. He has published two books and numerous articles. Between 1984-88, he served as a member on the Steering Committee of the Working Group on Urbanization in Developing Countries, the International Geographical Union. Currently, he serves as a Council Member on the Professional Committee of Economic Geography of the Geographical Society of China and also a Council member on the Urban Economic Society of China.

### **Deci ZOU**

Professor Zou is the President of the China Academy of Urban Planning and Design and the Vice President of the Urban Planning Society of China.

Since the 1950s, Professor Zou has been actively engaged in urban planning, urban design, research and administration and has assumed key roles in various research and development projects. In the past decade, he has published more than 40 professional papers and made presentations in many international conferences and overseas universities. In 1991, he was awarded Honorary Doctor of Literature by the University of Sheffield, Britain. Professor Zou is also a Member of the Expert Committee of China International Engineering Consultancy Corporation and a Consultant of the Planning Committee of Beijing and of Shenzhen.



## PREFACE

China's traditional urban development policy was to "control large cities, rationalize medium size cities, and actively promote small cities". However, this policy has been rapidly undermined in the last decade by the introduction of foreign investment and market mechanisms into the economy. As a corollary of these new economic initiatives, new city systems have emerged in the major economic regions, such as Beijing and Tianjin in the Bohai Rim, Shanghai and Pudong in the Yangtze River Delta, Wuhan in Central China, and Guangzhou, Shenzhen, Zhuhai and Hong Kong in the Pearl River Delta. These cities, especially the larger ones, continue to play a leading role in the development of these regions.

With the focus now on the Asia-Pacific region in general, and China in particular, as the leading area for economic growth into the next Century, it is very timely to re-examine the role of cities in China's national and regional development, and to address the opportunities, problems, and conflicts arising from this development process. As Hong Kong will become a Special Administrative Region of China after 1997, we further believe it opportune to examine the economic integration of Hong Kong and China, and in particular the idea of a "vanishing border" after 1997, both as a concept and as a policy.

This monograph originates from the Conference on *Chinese Cities and China's Development: A Preview of the Future Role of Hong Kong* jointly organized by the Centre of Urban Planning and Environmental Management, the University of Hong Kong, and the University Graduates Association of Hong Kong, which was held on 8-9 November 1993 as part of the 80th Anniversary Programme of the University of Hong Kong. We are most grateful to the support of Dr. Andrew Hamer of the World Bank, and prominent scholars and experts from China, Taiwan and Hong Kong who participated in the Conference and contributed to this monograph. Their perceptive comments have provided invaluable insights into aspects of China's development into the next century, and also the future role that Hong Kong can play. We sincerely thank Dr. David K. P. Li, Chairman of the Committee of Ninth Decade and Beyond, the University of Hong Kong, and Mr. A. G. Eason, former Secretary for Planning, Environment and Land of the Hong Kong Government, for their tremendous encouragement and support in

organizing the Conference. Special thanks are due to Mr. Eason who also wrote the Foreword.

We are most thankful to Citic Pacific Ltd., Jardine Matheson (China) Ltd., and Kumagai Gumi Co. Ltd. for their generous support and sponsorship to the Conference. For the production of this monograph, we are indebted to Miss Evelyn Hoi-Yee Lee, Mr. Lawrence Chau, and Mr. Ringo Li for their enormous help in the editorial work, Mr. Danny Wong for the attractive cover design, and Mr. Ha Duc-Chi, Miss Angela Yu and Ms. Mandy Chow for their assistance in the publishing arrangements. Without their kind support and assistance, the publication of this monograph would not have been possible.

Hong Kong  
December 1995

*Anthony Gar-On Yeh*  
*Chai-Kwong Mak*

# **INTRODUCTION**



# 1

## **URBAN CHINA: Looking Forward, Looking Back**

*Andrew Marshall HAMER*

### **THE PLIGHT OF THE CHINA WATCHER**

Writing about the future of urban China is a daunting task, because existing conditions change so rapidly and because even the definition of baseline "realities" is subject to great controversy. The paper reflects the sum total of eight years' work on China on behalf of the World Bank; though the opinions expressed are personal ones and do not necessarily represent the views of the World Bank Group. This paper sets aside models of carefully documented, balanced scholarship in favor of a more speculative exercise that, in broad brush strokes, lays out one person's views of existing conditions and likely future outcomes. In place of robust data and rigorous equations, stylized facts are employed, whose accuracy should be judged only in terms of orders of magnitude. The paper builds on the opinions first expressed at a conference sponsored by the University of Hong Kong in 1987.<sup>1</sup> That paper argued that urban China was far more prosperous than given credit for in print and would soon emerge as an urban colossus. This presentation reasserts those views and provides a vision of urban China 15 years from now.

### **URBAN CHINA: ASIA'S ADOLESCENT DRAGON**

The claims made are quite straightforward: urban China is already an economic and demographic giant and, in 15 years, it will overshadow every other economy, in the aggregate, save that of the United States; while achieving levels of per capita and household income that will herald the emergence of a massive middle class.

Let us start with the least controversial assertion: urban China is today larger than the population of any country other than India; in 15 years it may

double in size and include close to 50 percent of the country's population. At that point, China will begin the last stage in a dramatically foreshortened transition from rural to urban, one that will have as yet unexamined consequences for the political future of the country.

During the decade from 1981 to 1990, urban population increased by an average of 10 million per year. During the 1990s, that rate can be expected to increase even further.<sup>2</sup> At the same time, the rate of rural population growth is approaching zero, with negative growth rates soon to come. By the end of 1993, 337 million Chinese were permanent or long-term temporary residents of cities and towns,<sup>3</sup> just short of 30 percent of the total population. Within 15 years, the urban population will reach 500-550 million, with an upward revision likely, if potential temporary migrants are more easily absorbed as residents and if the presently excluded suburbs are incorporated into the officially defined system of urban areas in a more expeditious fashion.<sup>4</sup>

Though these demographic forecasts may appear venturesome, the assertions made about present and future output and income are far bolder.<sup>5</sup> They begin with the assumption that the renminbi now has, *on average*, the purchasing power of the US dollar (\$).<sup>6</sup> If that is correct, then the average urban resident has an annual cash income of \$1,800 and the average household, an income of \$6,300.<sup>7</sup> Furthermore, even if per capita output in urban areas is now no larger than twice urban per capita income, or \$3,600, the present urban population already generates at least half of current Gross Domestic Product (GDP), 8 or more than \$1.2 trillion. While this may seem like a very large sum, it is not, in relative terms: Hong Kong and Taiwan Province, with a combined population of 27 million, generate a joint GDP of over \$300 billion.<sup>9</sup>

Extrapolating from the record of the last 15 years, and forecasts made by the World Bank for the rest of this decade, one can predict another 15 years of GDP growth rates approaching 9 percent.<sup>10</sup> That implies cumulative expansion of 3.3 times and endpoint GDP of \$7.6 trillion, measured in present purchasing power terms. Urban *per capita* output, if it expands at 7-8 percent per year, will rise by a factor of three and reach \$10,000, with per capita income approaching half that level. Urban GDP will then total \$5.0-\$5.5 trillion, or about 70 percent of the national total. With the average urban household having an income of \$15,000,<sup>11</sup> the age of the middle class will have emerged.<sup>12</sup>

At present, in the urban sector, several other patterns are apparent. First, the cash income distribution within urban areas is unusually compressed, by international standards.<sup>13</sup> The top decile has an average income equal to only three times that of the bottom decile, and only about 50 percent higher than the mean income. Economic growth to date has brought dramatic improvements



in living standards across all income groups. Furthermore, poverty, as defined by multilateral institutions like the World Bank, no longer exists in China's cities and towns.<sup>14</sup> In fact, being an urban resident in China means being insulated from the ravages of rural poverty, wherever it may originate. Taking the national mean urban household income per capita as a yardstick, few provinces perform at less than 80 percent of that norm; while the best outcomes are within 50 percent of the national mean. So the benefits of urban growth have also been shared across space. Rural per capita income averages only \$800 or less than half the urban average and far less than the recorded average for the urban residents of any Chinese province. Anecdotal evidence and data from predominantly urban provinces (Beijing, Shanghai and Tianjin) suggest that rural prosperity is linked with proximity to urban centers, with all the opportunities to profit from technical, managerial, and capital inputs that entails. Since these are overrepresented among the coastal provinces, it is the rural residents of interior-particularly border regions in the west and south-that have benefited the least from the economic revolution under way. To date, then, poverty has depended more on community characteristics than on individual variables. And because peri-urban households are relatively well-off, they create a buffer zone between the truly privileged and the distant poor. This may, inadvertently, delay rural unrest and ameliorative responses by urban-based national and provincial policymakers to growing regional inequalities.

Note should be taken that many of these outcomes are administratively driven ones. In most developing countries, rural "poverty" is readily exported to urban areas, which then take on a disorderly look as public and private investments in infrastructure are overwhelmed by population growth. In China, migration to the cities, particularly larger ones, has been kept in check through an internal registration system that classifies unofficial migrants as "temporary" residents who live and work there at the discretion of the local authorities. From time to time, in the past, temporary residents have been shipped back "home" involuntarily. China's larger cities are still islands of relative privilege whose population increases at rates well below those one would expect for a country undergoing a transition from a rural- to an urban-dominated system. Today, all but unemployed transients are likely to experience little harassment if they choose to live in an urban area, regardless of size. However, temporary residents still tend to face discrimination in such fundamentals as access to low-rent housing, rights to enroll offspring in local primary and secondary schools, low-cost medical care, access to disability insurance and pension plans, and the right to unemployment insurance. As a result, few temporary are found in urban areas.

And the larger the city, the more likely its economic orientation, the composition of output, and the labor force's characteristics and pay reflect past government decisions. Only in the towns and smallest cities can one confidently claim that the command economic system has had a limited role in determining outcomes. Therefore, in the case of income disparities and urban poverty, past performance may not necessarily be an accurate indicator of future outcomes.

### **WHO GAINS, WHO LOSES DURING THE TRANSITION : A 15-YEAR FORECAST**

The road to a market economy will leave a mixed record in terms of inequality. Income inequalities within urban areas will increase. Wages that today are molded by central government guidelines, moral suasion, and tax penalties will be free to reflect merit and prejudice. Women and unskilled workers, as well as migrants with precarious residency status, will have limited job security and low wages in the formal sector. A second economy, with few links to the state-owned sector of today, will flourish, giving those with advanced education, unusual skills, connections, and entrepreneurial abilities access to previously unimagined income levels. The urban Chinese economy will display an income distribution more akin to that of today's Hong Kong, where the top 20 percent of households has a 47 percent share of total income and the bottom 40 percent is restricted to only 16 percent of total household income.<sup>15</sup>

Across regions, the rural poverty of today will predict the rural poverty of tomorrow; areas like Gansu, Ningxia, Tibet, or Guizhou are unlikely to make any great leaps forward in economic development, particularly if massive out-migration cannot or does not take place. However, the move to a market economy should, on average, lessen real household income differences between most other areas. The advantages of working in very big cities will diminish, in relative terms, as the full costs of living in those centers are shouldered to a greater extent by the direct beneficiaries.<sup>16</sup> The suburban coastal regions, all towns and smaller cities, and rural areas, more generally, already pass on much of the costs of housing and infrastructure services to the household level. As a result, in the future, the State may loosen constraints on migration and allow more unsponsored population movement. This outcome is not unexpected if one thinks of big cities in market economies: the reason all Americans do not want to move to San Francisco, Honolulu, or Washington, DC, is that the real income opportunities from such moves are restricted compared to likely outcomes in a large number of alternative locations. The result will be more urbanization, especially in coastal areas.

This trend toward letting the market control migration trends is becoming evident in Guangdong, as well as in the Special Economic Zones, and these advanced regions have already adapted by providing many of the privileges of urban citizenship to longer-term temporary residents.

There will be some reshuffling in the pattern of regional performance. Regional networks of cities will continue to respond to shifts in demand, differential improvements in connective infrastructure, and relative price changes that create new opportunities for or barriers to growth. This change will be all the more noticeable because the command economy is giving way to one responsive to fragmented decision-making by millions of firms and households, each reacting to relative price signals. Furthermore, for political reasons as well as in response to the challenges posed by size, modern China made a concerted effort to move early on from a physically concentrated or "city-state" model of urbanization to a decentralized one that actively supports the emergence of vibrant secondary centers. Some of that effort was wrong-headed and motivated by nuclear war impact avoidance fantasies (Third Front industrialization) or by spatial policies that tried to specify what size of urban center would be allowed to grow at which rate, all in the name of "balanced" growth.<sup>17</sup> Now the market itself will guide decentralization. That is because, with economic development, the so-called urbanization economies of agglomeration, which create an inverse relationship between production unit costs and population size and represent the general diversity and scale of the local urban environment, have become less relevant for a broad range of products than the so-called localization economies of agglomeration, where information spilling over from other firms in the same industry locally are the critical productivity-enhancing mechanism. Such localization economies become increasingly available to particular industries and services, which reap cost-reduction benefits from being close to producers of similar products, without requiring the simultaneous presence of a broad array of economic activities that only serve to boost the costs of doing business. Agglomeration economies of this type are quickly exhausted for many of the economic activity clusters; their benefits can often be fully exploited within relatively small urban centers. Therefore, as land and labor are priced increasingly according to market criteria, and *capital* moves more easily across administrative barriers, activities will move out of China's biggest cities to other, smaller centers.<sup>18</sup> For reasons discussed below, the spatial reach of this decentralization may be limited.

Massive investments in connective infrastructure will transform the Yangtze River region, from Shanghai to Chongqing; the Beijing-Kowloon railway will bring enhanced market access to landlocked provinces like Anhui

and Jiangxi; two new expressways will link Heilongjiang with Hainan and Beijing with Guangdong; while two more major highways will tie Shanghai to Sichuan and Jiangsu to Xinjiang. The expansion and modernization of major ports, including Shanghai's, will also have a bearing on relative growth rates across different urban clusters. Furthermore, the process of market-oriented reform will finally end the discrimination so long suffered by the inland producers of such raw materials as oil and coal. And the transformation of the former Soviet Empire and Viet Nam will open border regions to as yet unimagined possibilities to reap benefits from trade.

As discussed in greater detail below, foreign and outside investors play a critical role in the restructuring of China's urban areas. Where they choose to invest is therefore a significant variable in deciding what areas will grow rapidly and which will not. To date, Hong Kong-originating investments, which include disguised foreign or Taiwanese contributors, have swamped all other sources. One can confidently predict others, including investors from Korea, Japan, and Overseas China, will increase their stake in Chinese urban development. One can speculate that, given rising costs in Guangdong and Hong Kong's relative advantage in investing there, any shift away from Hong Kong sources will favor more northern locations, including Beijing, Tianjin, Shandong, and Liaoning, as well as the Yangtze Delta.

Though the factors just listed could lead to a shift in the regional origins of urban output, and thus a shift in urban population distribution, the spatial outcomes may disappoint many who expect a *radical* reshuffle. It is possible that the major changes in location behavior will be found *within* each of the existing dominant clusters of cities and towns. The reasons for this are not easy to summarize in a few paragraphs, but are intuitively sensible.

The regional pattern of manufacturing and producer services, by place of origin, is highly concentrated in terms of location.<sup>19</sup> And because the cited clusters attract the bulk of urban population, urban consumer services are also concentrated in the selfsame places. Why? Because of "... the interaction of increasing returns, transportation costs, and demand. Given sufficiently strong economies of scale, each manufacturer wants to serve the national market from a single location. To minimize transport costs, ... [it] chooses a location with large local demand. But local demand will be large precisely where the majority of manufacturers choose to locate. Thus there is a circularity that tends to keep a manufacturing belt in existence once it is established."<sup>20</sup> Furthermore, proximity to other producers matters, as discussed below. Thus, urban development across regions is generally a cumulative and self-reinforcing process with long-lasting effects.

This, of course, begs the question: what factors are critical to the

emergence of a *new* growth center that cannot, initially, take advantage of past investor preferences? The answer is important for local, regional or national leaders who wish to remold the comparative advantage of particular places, and thus attract significant new investment from elsewhere. Unfortunately, there is little consensus on the issue. The mathematically minded tend to find the question too difficult to model. Their less-quantitative peers tend to become bogged down in descriptive analyses and provide little in the way of an explanatory framework that can stand scrutiny. What is more, this type of analysis is largely directed at developed country growth centers.<sup>21</sup>

Factors often cited as having explanatory power include: (1) enhanced interregional transport facilities; (2) abundant natural resources, marketed at better prices; (3) export processing opportunities created by a changed policy environment; (4) a growing critical mass of research and development capacity; (5) the emergence of competitively priced pool of skilled labor; (6) greater exploitation of ethnic or linguistic ties to outside investors; (7) increased opportunities to utilize "quality of life" advantages; (8) more effective promotion of a locality through the creation of a tax and regulatory environment attractive to investors susceptible to the lures of "comparative shopping"; and (9) an aggressive deployment of municipal resources to increase the volume of local infrastructure services, which are only available if produced locally. To date, no proven "cookbook" has emerged with recipes for proven success, to be picked off the shelf and replicated by an aspiring locality.

One thing is clear, however. Once established, a local cluster of cities and towns seems to benefit from the fact that exit from the select group of significant urban growth centers is as difficult as admission into the ranks. History matters and employment patterns persist.<sup>22</sup> That this should be so is not intuitively obvious. The literature on industrial location suggests firms readily respond to changes in local variables such as wages, taxes, and access to consumers. Furthermore, even over a short span of time—say one decade—one finds a relatively large number of enterprise "births" and "deaths." Yet, "there is a glue which holds industries in place."<sup>23</sup> That glue includes continuing local or regional comparative advantages in attracting given industries, as well as the fact that industry-specific knowledge propagates quickly within areas where a particular industry is concentrated while diffusing slowly over space, to other locations. The need for access to critical intelligence relevant to a specific set of industries, obtained through long-established social networks, binds firms to preeminent locations over time. The one temporary exception to this is found in the locational behavior of emerging advanced technology industries. They appear to incubate in areas characterized by relatively diverse economic activity, and providing a critical

mix of unstandardized inputs. Thereafter, however, the growth patterns of even "high tech" firms favor local centers where concentrated clusters of same-industry producers have developed.

What then explains "megacities," or large, multinucleated metropolitan areas? At the risk of simplification, such areas tend to form around a core city exploiting a natural resource advantage (including transport-related ones, such as harbors). These core areas foster the creation of other, nearby specialized centers, some with industrial clusters that have high localization economies requiring relatively large city sizes to exploit the full potential of agglomeration. These other centers chose nearby locations not because they benefit from sheer metropolitan size but because they seek to reduce transport costs incurred in interindustry trade. Layered over these localized advantages, other activities emerge, to benefit from the sheer, undifferentiated size of the megalopolis. Reference has already been made to emerging "high tech" industries seeking unstandardized inputs most easily found in the accumulated diversity of associated cities and towns. To these one can add producer services, which benefit from locating in the selfsame environment.

This does not mean that new clusters are unlikely in China, or that the regional distribution of urban output cannot shift. Past experience suggests that successful new entrants tend to undergo a "Big Bang," acquiring a critical mass of jobs in a relatively rapid surge, clearly discernable within a decade. In such cases, the associated macropolicy environment has usually not stabilized and investments in "connective" infrastructure can still have "inframarginal" impacts. Such instances aside, the best predictor of future outcomes is past performance, often reaching back a century or more. Few lightly urbanized places in China today are likely to emerge, unexpectedly, as major players in the future development of the urban economy.

Thus, one can anticipate the likely shape of the future urban system. Individual outcomes will depend on the urban network within which a particular center is located. And most urban output will be produced by the existing, interlocked network of cities and towns that include (1) the Yangtze Delta, centered around Shanghai, Hangzhou and Nanjing; (2) the Yangtze River corridor, moving from the Delta back into Sichuan; (3) the Hong Kong-Guangzhou Pearl River Delta; (4) the Beijing-Tianjin-Tangshan region; (5) the Shenyang-Dalian corridor in Liaoning; (6) the Yantai-Jinan-Qingdao region, which will incidentally provide a small city model of urban regional development; and (7) the Fuzhou-Xiamen corridor in Fujian. Periphery regions will account for only small portions of future urban growth.

In this process of regional development and differentiation, special note should be taken of the *internal* transformation that will occur in megacities like

Shanghai, Guangzhou, Beijing and other present-day "underachievers." The same processes that saw Hong Kong transform itself into a productive services center, shedding much of its manufacturing production in favor of the nearby Delta, will take place in these metropolitan areas, only more dramatically. This is because the largest cities of China were artificially endowed with a massive and diffuse manufacturing capacity, and provided with few incentives (until the last decade) to develop the services sector. Now, as relative prices work to expel much routinized manufacturing from their midst and foreign capital flows into the newly liberalized services sector, these megacities will begin to refocus their development strategy to the requirements of a knowledge-based economy. Manufacturing, which now accounts for two thirds of local output and employment in megacities, will have to be cut back to less than half those levels. The megacity economy will rely heavily on information services to create competitive manufactured products in selected subsectors across the nearby region; for this to occur, up to 40 percent of the local labor force will have to be employed in the producers' services sector. Most of the beneficiaries of the transfer of activities will be located in adjacent suburbs and in the nearby clusters of cities and towns, validating the earlier prediction concerning regional urban networks. This reflects not only the pattern of development in advanced market economies, but also the continuing shortfall in transportation links and the undeveloped nature of capital markets that will plague China for the foreseeable future.

These large multinucleated centers will also continue to experience growing spatial differentiation, with significant implications for the location of employment and residences. In this regard, China's cities will begin to resemble large urban centers found across middle-income and developed market economies. Though apparently bold, this prediction is derived merely from the fact that urban development follows fairly standard spatial patterns, under market-type incentive structures.<sup>24</sup> As those market incentives become dominant, any idiosyncratic characteristics of China's cities will fade away. Among the empirical regularities one can expect to find are the following: (1) the Central Business District (CBD) will experience declining residential population while holding onto roughly the same absolute number of jobs; in both cases, the relative share of the CBD will fall; (2) the suburbanization of employment and housing will proceed at densities that decline rather gradually across space, reflecting both the relatively rapid appreciation of land prices in the periphery and user responses to those price increases, in terms of land use density; (3) the density and location of employment and residences react only gradually to changing price signals, and the lags in adjustment are large enough that one can expect response to a given set of price signals to continue

for at least a decade; (4) the rate of adjustment can be accelerated or delayed by public policy, but there is little that can be done about underlying causes and related outcomes; the increased demand for personal mobility will have to be accommodated, for example, as will the pattern of differential relative land price increases that are necessarily higher in the periphery than in the CBD; and (5) in any city, when policy distortions occur, they interact with market fundamentals to create predictable outcomes; local investors and policymakers could save themselves a great deal of trouble by internalizing this message, and learning from international experience.<sup>25</sup>

In this regard, the property market boom we have witnessed over the last two years is no aberration; it merely foreshadows a return of China's megacities to the mainstream worldwide market economy. Individual real estate investments around Guangzhou's metro or in Shanghai's Pudong and Puxi may fail but the trends are inexorable and may reward even the foolish investor in hotels and office buildings.

Much else will have to change if the gap between potential and existing performance levels in megacities is to be bridged. Infrastructure investments will have to be both increased and redirected; for example, phone connections in an average megacity will have to grow at least fivefold to match levels already achieved by Hong Kong. In addition, there is an unfulfilled reform agenda that must be tackled if China's cities are to profit fully from future opportunities and validate the forecasts included in this paper.

## **THE NEXT 15 YEARS : PRECONDITIONS FOR SUCCESS**

China's cities and towns have benefited from the open-ended nature of reform pursued over the last decade, as well as the decision effectively to privatize the rural sector. The hallmark of the reform process has been to combine decentralized decision-making, ceaseless piecemeal experimentation, and a willingness to expand the permissible reform agenda in response to perceived key bottlenecks. Once a consensus is reached on any given topic, the experience is summed up and translated into legislation at the national level. Through this process, relatively autonomous institutions have emerged and market forces have displaced many of the features of the command economy. Like the peeling of an artichoke, central, provincial, and local governments have developed separate identities; business enterprises have gained a significant measure of autonomy; and the faint outlines of a civic society have emerged as individuals and groups quietly assert their right to operate beyond the confines of the Communist Party.

There is more. China's leaders have understood, almost instinctively, that



the first avenue of attack when faced with an intractable problem is to create opportunities for *new* development that evade the impact of past restrictions and the vested interests who uphold them. The four Special Economic Zones in South China, including Shenzhen, were established in 1979, in the most graphic example of this approach. Another notable example of this was the decision to encourage the creation of de facto metropolitan regions that combine the corsetted state-owned enterprises based in the cities with suburban "rural" businesses that operate outside of the world of Socialist welfare entitlements, "soft" budgets and automatic subsidies, and redundant labor.<sup>26</sup> In addition, the newly arrived foreign investors, acting in a relatively autonomous manner, have been allowed to rewrite the business operations' rule book regardless of where they might locate. As a form of insurance, many have been steered to economic development zones or special economic zones to ensure that the past does not interfere with the future. These concessions have been enough, along with the reemergence of market towns, to launch an urban renaissance, allowing the modernizers to draw on land, labor, capital, technology, and marketing inputs wherever in space the constraints can best be avoided. If a city location creates intractable obstacles; the choice of a special zone, a move out, or a subcontracting relationship with enterprises beyond the invisible boundary separating city and suburbs, quickly solves the problem.<sup>27</sup>

The downside of the Chinese reform strategy has been a legacy of significant loose ends and inherited inappropriate practices frozen in time. A few examples will suffice to illustrate the magnitude of these obstacles. The state-owned enterprise cannot yet shed redundant labor nor set monetary compensation packages appropriate to its requirements. It carries onerous welfare responsibilities covering worker housing, unemployment insurance, health care, and retirement benefits without recourse to burden-sharing mechanisms routinely available in a market economy. Often, among the largest enterprises, welfare-related functions employ a disproportionate number of workers, when measured by market-economy yardsticks. And all this is bleeding the coffers of central and local governments, while preventing China's banks from performing in a responsible manner.<sup>28</sup> The largest cities in China, even the privileged capital, still look like museums-inappropriate uses fossilized in time. Until very recently, there were no legal means to sell off property originally allocated to a user by a government bureau but since rendered obsolete. As a result, Chinese cities are top-heavy with industrial and warehouse operations in core area locations best suited for high value-added services. Again, the recent property boom is, in a sense, a wake-up call.

Given the above, China's leaders, at all levels, have neglected the software of the market economy. While their skepticism about the alleged benefits of

wholesale privatization of the state-owned sector is healthy, eventually they will be forced to tackle issues related to improving the public regulatory framework, strengthening enterprise governance mechanisms, and creating a more appropriate social safety net for workers. The state-owned enterprises need to define fundamentals such as who owns enterprise assets; who represents the owners in exercising the power of oversight and of setting major policies; and how public sector regulators can be divested of their management functions, allowing enterprise managers to exercise authority over marketing, research and development and product development in a manner consistent with best international practices.

Factor mobility must be encouraged, both through a diversification of ownership and the creation of a regulatory "level playing field," which then allows investments across municipal and provincial boundaries to proceed unfettered; and through measures that cut the links between workers and any one employer. Welfare functions, such as the provision of housing, health insurance, pensions, and unemployment compensation must be "socialized" or otherwise returned to the market. With housing in-kind benefits replaced by a commercial housing delivery system undergirded by cost recovery rents and restructured wages, and with social security benefits made portable across the widest possible geographic area and all types of enterprises, China will be able to tackle the long-delayed restructuring of the state-owned enterprises. At that point, China's largest cities will be free from one major impediment to full participation in the fruits of modernization.

In addition, with some exceptions, that same modernization process will require a legal and regulatory infrastructure similar to that found in developed countries. Rules and regulations must be developed, publicized, and enforced in a transparent manner by a civil service that knows the limits of its authority and is relatively incorruptible. Contracts and property rights must be unequivocally enforceable in courts perceived to be completely independent of the preferences of government or Party officials. Debtors who fail to fulfill their obligations must face the unpleasant consequences, even if bankruptcy or foreclosure occurs. Financial intermediaries, so long accustomed to act as mere agents of government authorities, without having to assume responsibilities for bad judgments, will have to internalize the consequences of betting on the wrong horse. None of these conditions prevail today.

Urban planning practices need to be overhauled. China's urban planners may be among the last local hold-outs in this transition to the market.<sup>29</sup> Trained in the discredited practices inherited from the former Soviet Union, in turn unthinkingly adopted from British "garden city" socialists and followers of Corbusier, in France; the physical planners are important, if rarely commented-

upon, actors in the transformation of China's urban areas, particularly its cities. Why? Because their decisions directly affect the profitability of investments, particularly business service sector and residential development, by determining the way infrastructure expansion is planned, floor-area ratios are set, and redevelopment exactions are calculated. In the past, they operated as part of a top-down command system where user choice and individual initiative was weak. Even today, the temptation to predetermine the economic "vocation" of a city, a district, or an economic development zone seems irresistible, as the Pudong experiment in Shanghai aptly shows. The best prescription for reform is to force these bureaucrats to work in the spotlight of public opinion, while absorbing the message of market reform: act as facilitators and become user-friendly. Elitist master plans will melt under the intense gaze of the intended beneficiaries, and be replaced by far sketchier strategic plans guiding the spatial pattern of infrastructure investments that are developed in constant consultation with the community at large and in response to constantly monitored feedback signals.<sup>30</sup> This may ultimately require more democratic local governments but, as the experience of Singapore shows, "democratic" is a very relative term. Nevertheless, at worst, the people's representatives will include respected members of their community, and have a healthy regard for the interests of businessmen in their midst.

More generally, the full benefits of modern capitalism imply the need to minimize the role of secrecy and allow a reasonable flow of information. From the enterprise through to city hall and on to the macro level, statistics must cease to be privileged information; and open commentary on them must become a routine manner. Compare the financial pages of *South China Morning Post*, *New York Times*, or *Financial Times*, with any Chinese newspaper; or compare the degree to which statistics and maps are made available by local authorities in China and Hong Kong; and the path yet to be traveled is instantly apparent.

Disclosure, along with the emergence of a more transparent legal and regulatory environment, are also the only credible weapons to combat the scourge of corruption evident in any country where government favors represent windfall profits and regulators themselves are not regulated. This implies a need for a more open press and a more assertive role for legislatures at all levels of government.

Still more, revenue-generation mechanisms must exist at the national and local levels that are perceived to have enough popular consent to be enforceable. As instruments such as personal income taxation become an important source of government revenue, voluntary compliance will become more important than ever before. In a similar manner, disclosure and some

degree of legitimate public participation is necessary to allow massive infrastructure works to go forward. Every city and every region faces significant backlogs in investments in roads, ports, airports, power supplies, telecommunications, and other such facilitative infrastructure.

These assertions will also be realized more quickly than otherwise because a substantial middle class will be in command of China's cities. Sociologists and political scientists are best suited to comment on this subject. Yet there is little doubt that today, as before, authoritarian regimes cannot long survive in a middle-class sea; some form of representative government always becomes the norm. Wealth, in effect, rises high enough to begin to check political power.<sup>31</sup>

Let the argument be restated: the growth rates of the past came relatively easy; in the future, the transition cannot be sustained unless the above agenda is also addressed. But now, there will be a powerful, local constituency. In addition, success will continue to depend on the simultaneous presence of foreign or outside investors.

## WHAT ROLE FOR OUTSIDE INVESTORS AND HONG KONG

The role of the outside investor in China's recent development seems so obvious that rarely do observers ask what makes it *indispensable* to urban economic success there.<sup>32</sup> There are many models of development that minimize the contributions of foreign investors. Japan's transformation relied on licensing arrangements and a meticulous search for "best practices." Dependency theorists, writing about foreign investment in countries from Africa to Latin America, have emphasized negative impacts.

In the case of China and other post-Socialist economies, one must begin by emphasizing the legacy of the Stalinist and neo-Stalinist experience. That development strategy was based on a war mobilization model, derived, in turn, from Germany's experience in World War I and Allied experience in World War II. It created an enormous industrial base, using proven mass production technologies, and backed up by a labor force that was literate and, at the top end of the skills spectrum, well-endowed with engineers and research scientists. Among end-users, the defense establishment and certain types of infrastructure sectors were favored; other sectors, such as providers of personal and business services, or producers of consumer durables, withered in an environment where bureaucrats set priorities and issued orders.

To get from that model to a market model dominated by consumers with unpredictable tastes, competition between providers, a significant amount of foreign trade, and a pared-back government requires a multifaceted restructuring of the Socialist urban economy, among other things. And,

comparative experience among post-Socialist countries suggests that such a restructuring requires foreign involvement.

In China's case, the Special Economic Zones aside, the model's first test came in the Pearl River Delta and its urban network. Then and thereafter, local urban transformation has coincided with foreign investment. Why? In manufacturing, the answer is clear: provision of lessons and resources otherwise not available *in a compressed time frame*. What exactly does the foreigner provide?

- product and market identification and development, including the linking of "brand names" with local contractors;
- technology, material inputs, styling, finance, insurance, and business services;
- quality control, and production and inventory management;
- productivity-driven labor compensation and management systems; and
- packaging, transportation, customs clearance, payments and advertising.

In the services sector, where the restructuring process is still selective, one can summarize the impact as one that encourages the introduction of new products, new standards of service delivery, and new associated skills. The subsectors involved are potentially as significant, given the future role of services, as the transformation of manufacturing: hotels yes, but also public utilities, supermarkets, department stores, legal and financial services, property markets, leasing, insurance and the media.

Underlying all this is the introduction of the culture of capitalism in the work unit and in relations between the work unit and government or other work units. The Socialist work unit was, historically, run by managers with limited autonomy over most critical variables, including input mix, product mix, product development, inter-enterprise relations, and market development. Managers also faced time- and resource-consuming responsibilities in the areas of worker housing and welfare; for managers of a large enterprise, this meant that a significant proportion of workers were assigned to welfare-related responsibilities. Finally, in response to pressures to rapidly create a pliable labor force to generate predictable outputs, managers were assigned workers, given the right to provide some monetary incentives, but denied the right to fire unmotivated or redundant workers.

The foreign-run factory or service establishment sets this management model aside and replaces it with a strong manager approach, where virtually all

the variables come under management control. Industrial bureaus in the government are sidelined and workers must earn the right to gain and retain a job slot. Welfare responsibilities are replaced with higher wages and an embryonic social security system is fostered to replace the direct provision of health services, pensions, and unemployment benefits.

This new mix of technology, inputs, marketing, and management has to be implanted and widely disseminated in each individual system of cities and towns. This view is not meant to denigrate preexisting local capacity to learn, adapt and move forward; but such a capacity is not enough. Thus, *where* and *to what extent* outside investors get involved in the urban sector is critical to the fate of individual cities and towns.

The preceding sections, in outlining the prerequisites for continued long-term expansion of the Chinese economy, answer part of the question about Hong Kong's future. Hong Kong is most unlikely to share the earlier fate of Shanghai, Guangzhou, Tianjin, Ningbo, and other centers that for decades after Liberation had the forlorn look of neglected museums; weeds are unlikely to grow from cracks in Hong Kong's skyscrapers. First, China will become too much like Hong Kong for that fate to materialize. One can predict that, having tasted the fruits of prosperity while remembering the bitter pills of "politics in command" and relentless austerity, China will acquiesce-over 15 years-to the implementation of further far-reaching reforms consistent with a market economy. But China's model will be Singapore, not today's Hong Kong. And Hong Kong may have to pay a price by becoming more like that paragon of the orderly and the well behaved. In fact, the takeover is already well under way, without crippling effects. China's enterprises may now be the largest outside investors in Hong Kong; they may, in fact, have more invested in Hong Kong than vice versa. Furthermore, major local infrastructure initiatives and even political reforms apparently no longer move far without Beijing's say-so.

Finally, for those that despair, it helps to remember China's leaders have their eye on a far larger prize: Taiwan Province. Though obvious, it bears restating that any chance for reunification would be lost, for generations to come, if Hong Kong's fate follows the pessimist's scenario. Since one can confidently predict that any reunification will take place in a time frame beyond that under discussion in this paper, the implied incentives to behave will still be binding in 15 years.

Hong Kong has, of course, a far greater role to play than that of an intellectual beacon. Even after reincorporation, Hong Kong will continue to play a role as outsider. It has proved to be a critical link in China's efforts to earn foreign currency. Hong Kong can also easily continue to mobilize enormous resources with which to invest directly in or lend to Chinese

enterprises, while providing access to technology and marketing intelligence. Similarly, Hong Kong entrepreneurs will be instrumental in expanding the regional infrastructure of China, linking cities from Beijing to Wuhan more firmly with its local economy, and thereby further reducing the disadvantages of being "off-center." No place other than Shanghai is likely to have the scope of skills, information technology and resources to compete with Hong Kong in doing what it does so well. Other things being equal, Shanghai might emerge the winner, geography and politics considered. All things are not equal, however. Shanghai is still far behind Hong Kong in almost every variable critical to successfully becoming the business center of China. Shanghai does have a lead in engineering and scientific research capabilities, but that lead will be eroded by Hong Kong's own efforts; in addition, Shanghai lags badly in finance and trade skills, as well as the associated infrastructure requirements and legal-regulatory environment.<sup>33</sup> Given the strong inertia assumed to be inherent in urban systems, Hong Kong's preeminence cannot be easily overcome unless the local business environment is catastrophically altered; this, again, seems unlikely. So, for the next 15 years, Hong Kong will find itself largely unchallenged.<sup>34</sup>

Hong Kong can also make a singular contribution to overall urban development by investing across China, and in the process accelerate the process of market integration and the defeat of local protectionism. The self-same strategy will buy protection for Hong Kong, as it makes alliances outside the Guangdong area. In fact, one indicator of Hong Kong's long-run political viability as a "capitalist implant" will be the changing ratio of Guangdong-based to investments in other Chinese urban areas.

Another imponderable is the behavior of foreign investors. Here, the issues are not the ones addressed earlier. Instead, the question is: will the outside investor continue to favor doing business *through* Hong Kong? As bilateral relations between Taiwan Province or Korea and China evolve, the pressure to cut out the geographic middleman will increase. Hong Kong will become less important as a conduit for other people's money and rely more heavily on the impact of its own initiatives. Since Hong Kong's independent role in China's development will increase significantly over the next 15 years, any readjustment to a loss in its status as middleman for other outside investors should be tolerable.

## **CONCLUSION**

Each observer can write his own conclusion. The optimistic scenario, to which this writer subscribes, sees China opting for a more open urban society—not because that is intrinsically good, but because it is necessary to sustain rapid economic growth. Through that choice, Hong Kong's prosperity and freedom will be preserved.

In closing, reference should be made to the fact that it is very difficult to be articulate about what, from a cursory review of past efforts, appears to be a rather under-researched topic. Some obvious candidates for intensive future research include:

- creating working definitions of Standard Metropolitan Statistical Areas for China's urban centers, which could serve as the basis for improved cross-jurisdiction planning;
- providing in-depth analysis, through longitudinal studies, of the number and behavioral characteristics of temporary migrants in China's cities and towns, while reestimating local de facto urban resident population along internationally accepted criteria;
- developing better estimates of the purchasing power parity value of Chinese output and consumption;
- tracking the fate of existing and emerging networks of urban centers, and explaining the reasons behind their differential performance;
- compiling data and indicators on the spatial pattern of urban foreign investment and its impact;
- determining the degree to which Hong Kong continues to be used by both Chinese investors and by foreign and Taiwanese investors, exporters, importers, and tourists;
- comparing the fate of Hong Kong vis-à-vis Shanghai;
- establishing the relative weight of the Hong Kong-Non-Guangdong connection, as Hong Kong and Guangdong integrate further; and
- studying the fate of Hong Kong's civil service and judiciary under Chinese rule, as well as the net migratory flows of local professional and managerial personnel after 1997.

This agenda can only be examined in a meaningful way if it is tackled in an interdisciplinary manner. For too long political scientists, demographers, geographers, sociologists, and economists have gone their separate paths.



Worse still, practitioners of subdisciplines within any of the above categories rarely benefit from each other's findings. Research on urban China has suffered as a result. The time has come to override compartmentalized investigation. Perhaps one final prediction is in order: in the future, issues will be addressed in a manner that takes full advantage of the perspectives offered by disciplines focusing on different aspects of urban China's transition to a market economy.

## NOTES

1. A. HAMER, "Four Hypotheses Concerning Chinese Urbanization" in Reginald KWOK, William PARISH, Anthony YEH, and XU Xueqiang, eds., *Chinese Urban Reform: What Model Now?*, New York: M.E. Sharpe, 1990. Because this paper was prepared in a less academic fashion than a journal article, no effort has been made to reflect the materials that have influenced the conclusions reached on a paragraph-by-paragraph basis. Note should be made, however, of a few very useful, recently published, sources: Michael BELL, Hoe Ee KHOR, and Kalpana KOCHAR, with Jun MA, Simon NIGUIAMBA, and Rajiv LALL, *China at the Threshold of a Market Economy*, Washington, D.C.: International Monetary Fund Occasional Paper #107, 1993; Joseph Y. CHENG and Maurice BROSSEAU, eds., *China Review 1993*, Hong Kong: The Chinese University Press, 1993; Norton GINSBURG, Bruce KOPPEL and T. G. McGEE, *The Extended Metropolis: Settlement Transition in Asia*, Honolulu: University of Hawaii Press, 1991; Kevin RAFFERTY, *City on the Rocks: Hong Kong's Uncertain Future*, New York: Viking Press, 1990; Gerald SEGAL, *The Fate of Hong Kong: The Coming of 1997 and What Lies Beyond*, New York: St. Martin's Press, 1993; Susan L. SHIRK, *The Political Logic of Economic Reform in China*, Berkeley and Los Angeles: University of California Press, 1993; Yun-Wing SUNG, *The China-Hong Kong Connection: The Key to China's Open Door Policy*, Cambridge: Cambridge University Press, 1991; Ezra VOGEL, *The Four Little Dragons: The Spread of Industrialization in East Asia*, Cambridge: Harvard University Press, 1991; Ezra VOGEL, *One Step Ahead in China: Guangdong Under Reform*, Cambridge: Harvard University Press, 1989; Yue-Man YEUNG and Xu-Wei HU, *China's Coastal Cities: Catalysts for Modernization*, Honolulu: University of Hawaii Press, 1992; along with innumerable issues of the *Far Eastern Economic Review* and *South China Morning Post Weekly*.
2. Demographic data are drawn from *China Statistical Yearbook 1992*,

- Beijing, China Statistical Information and Consultancy Service Center, 1992.
3. Assuming a present-day annual urban population increase of 12-13 million. The definitions of permanent and temporary are essentially legal ones and are associated with migration control policies. Temporary residents, totaling approximately 70 million, have crossed administrative boundaries and left their place of origin without securing a legal shift in their place of permanent residence.
  4. For example, most temporary residents are unaccompanied, working-age individuals, for institutional and policy reasons discussed below. The definition of temporary residents, for purposes of annual population counts, is arbitrarily restricted to those who have lived in an urban place for more than one year. Reducing the length of this cut-off point to three months would increase the official urban population by up to 10 percent. In addition, over the next 15 years, the degree of local decentralization will be such that the establishment of urban-rural boundaries will become increasingly arbitrary; where the line is drawn will determine what is urban, what is not.
  5. In fact, the two sets of predictions are interdependent. Growth in per capita output and income is associated with increasing levels of urbanization, particularly as countries move from low- to middle-income status.
  6. This view is essentially the same as that taken by the International Monetary Fund and the World Bank. See Annex IV in International Monetary Fund, *World Economic Outlook: A Survey by the Staff of the International Monetary Fund*, Washington, D.C., May 1993; and Table 30 of "World Development Indicators" in the World Bank, *World Development Report 1993: Investing in Health*, New York: Oxford University Press, 1993. The most detailed assessment on the subject to date, which undergirds the *World Development Report 1993* estimates, is REN Ruoan and CHEN Kai, "An Expenditure-Based Bilateral Comparison of Gross Domestic Product Between China and the United States," processed, May 1993; it will soon be issued as a World Bank Policy Research Working Paper. Purchasing power rates, being averages, are *not* meant to be applied to individual items or services. Their use to calculate *urban* sector output is a second-best device that yields approximate results. Even then, purchasing power rates for China need refinement, as a review of the IMF and World Bank sources will reveal. Nevertheless, when comparing these rates with conventional foreign exchange rates, it is only the former that can resolve such paradoxes as (a) why consumption

indicators and savings rates seem so out of line with conventionally defined per-capita incomes; (b) why the US urban poverty line for a family of four in the United States is more than 10 times average urban household incomes in China; (c) why Chinese households living in the United States calculate that they can move back to China and replicate their present standard of living with only a fraction of the renminbi that results from multiplying current dollar incomes by the conventional exchange rate; and (d) why Chinese visitors to the United States find the dollar buys only a fraction of what it can buy in China, when converted at the conventional exchange rate.

7. The average urban household has 35 persons, according to *China Statistical Yearbook 1992*.
8. GDP per capita can be calculated for a number of larger cities directly from Table T17.7 of the cited 1992 statistical yearbook for China. Household income per capita data, though not city-specific, can be inferred from Table T8.9 which lists average annual income per capita for urban households in cities of different sizes.
9. The GDP totals here are converted using prevailing foreign exchange rates, not purchasing power parity rates. Data derived from the most recent issues of *Country Profile: Hong Kong, Macau, 1993/94* and *Country Profile: Taiwan, 3rd Quarter 1993*, both issued by the Economist Intelligence Unit, London, 1993.
10. World Bank, *China: Updating Economic Memorandum: Managing Rapid Growth and Transition*, Report No. 11932-CHA, Washington, D.C., June 30, 1993.
11. This assumes urban household average will fall to 3 persons.
12. All these estimates *exclude* Hong Kong's contribution to the Chinese economy. The purchasing power parity value of Hong Kong's GDP in 1991 was \$107 billion, according to Table 1 of the "World Development Indicators:" published in the cited *World Development Report*.
13. For a recent study on the subject, see Azizur Rahman KHAN, Keith GRIFFIN, Carl RISKIN, and ZHAO Renwei, "Household Income and its Distribution in China," *The China Quarterly*, December 1992, No. 132. The authors attempt to estimate the cash value of in-kind benefits, using 1988 data. Casual empiricism, and World Bank work on the housing market and social security systems in urban areas, suggests that the relative size of in-kind benefits is much greater today. See also Stephen HOWES, "Income Inequality in Urban China in the 1980s: Levels, Trends and Determinants," London: The Development Economics Research Programme, London School of Economics, July 1993; which is based on

household income official survey data collected annually between 1981 and 1990.

14. See World Bank, *China: Strategies for Reducing Poverty in the 1990s*, Report No. 10409-CHA, Washington, D.C., May 15, 1992.
15. Derived from Table 30 of the "World Development Indicators" published by the World Bank in the cited 1993 *World Development Report*. Stephen HOWES, op. cit., provides evidence that increasing inequality is already present in data from the period after 1983.
16. However, the urban reforms over the near term will allow workers in state enterprises to receive offsetting wage adjustments.
17. The attempt to specify in size and location of urban centers, and to mandate thereby the "rank order" of the overall system of cities and towns is intuitively attractive but futile. In theory, given the links between economic activity and the associated average sizes and numbers of different types of cities and towns, governments might attempt to optimize the number and size of urban areas within its boundaries. In practice, those links are complex to fathom and ever-changing, creating a "moving target" that never stabilizes long enough to generate an equilibrium or efficient final solution. What is more, for any given center, ultimate "efficient" size is extremely sensitive to small changes in the magnitude of explanatory variables. Social engineers and macrospatial planners are doomed to failure.
18. Among the best expositions of this transformation, see J.V. HENDERSON, *Urban Development: Theory, Fact, and Illusion*, New York: Oxford University Press, 1988.
19. For a lengthy review of the arguments involved, and a set of illustrations drawn from among developed countries, see Paul KRUGMAN, *Geography and Trade*, Cambridge: MIT Press, 1993. Krugman's hypotheses deviate from those found in this paper in a few critical respects. Krugman does not necessarily agree that activity displaced from an economically diversified core metropolis, in response to the imperatives of localization economies, will likely migrate across relatively short distances, and remain within the surrounding cluster of suburbs, cities and towns.
20. Paul KRUGMAN, op. cit., p. 15.
21. Perhaps the most masterful recent exercise is William CRONIN, *Nature's Metropolis*, New York: W. W. Norton and Co., 1991, which traces the reciprocal impacts of Chicago and its western hinterland on each other, more than 100 years ago. Other recent efforts include Edward GLASSER, et al., "Growth of Cities," *Journal of Political Economy*, Volume 100,

- Number 6, 1992; Paul KRUGMAN and Raul Livas ELIZONDO, "Trade Policy and the Third World Metropolis," Washington, D.C.: Institute for Policy Reform, November 1992; and Vernon HENDERSON, Ari KUNCORO, and Matt TURNER, "Industrial Development in Cities," Providence, Rhode Island: Brown University, July 1993, processed.
22. For example, Vogel's study of Guangdong Province, *op. cit.*, makes it clear that the rapid growth in industrial output and household incomes was grounded in an intricate division of labor between the "city state" of Hong Kong and its Guangdong hinterland that preceded the Communist takeover; this arrangement was merely interrupted between 1950 and the start of the modernization drive, dating from 1978. The "catch up" phase that followed, though dramatic, should not be confused with the creation of a previously unanticipated regional development cluster.
  23. Vernon HENDERSON et al., "Industrial Development in Cities," *op. cit.*
  24. Most spatial characteristics of a Chinese city are easily understood even by someone who only studies urban development patterns in a developed country, such as the United States. By contrast, American and Chinese farms are polar opposites in terms of spatial characteristics and factor mix used in production. The reasons for this are straightforward. First, the prices of tradeable goods, produced in any city reflect world prices, while wages paid workers producing such goods are a function of those standard world prices and the technology used, which can vary greatly. Second, wages of workers producing goods and services that are not traded across regions or countries, and employing more than half of the local labor force, are a function of prevailing wages in the tradeable sector; the higher the latter, the higher the former. Third, the prices and nontraded goods and services are a function of wages of workers in the nontraded sector; technology is not a major explanatory variable, since it varies relatively little across countries. Fourth, urban infrastructure in megacities shares the characteristics of nontraded goods; the technology involved is similar across cities. Thus, in urban areas, the ratios of infrastructure output prices to input prices; and of infrastructure prices to average household incomes are roughly the same across countries; only absolute terms vary dramatically. And the behavioral responses expected of producers and consumers will therefore be roughly the same around the world.
  25. For example, land price behavior is often viewed as driven by evil "speculators" or subject to rules that defy gravity. Nevertheless, experience shows land values appreciate at least as fast as economic growth. Similarly, if an urban system is subject to "shocks," including rapid increases in funds flowing in from abroad, a sudden change in the

"rules of the game" under which land is available for development, or a drastic alteration in the rate of return on financial instruments available to investors, then land price "booms and busts" are inevitable. Across urban China, land market behavior in 1993 is extremely telling in this regard.

26. In medieval Europe, the initial surge of former serfs to autonomous cities was later followed by a reverse flow of entrepreneurs out to the nearby countryside, in an effort to avoid the restrictive practices of urban guilds.
27. Susan L. SHIRK, *The Political Logic of Economic Reform in China*, op. cit., provides an excellent noneconomist's perspective on these issues.
28. China was able to mitigate the potentially catastrophic consequences of accommodating the needs of loss-making state-owned enterprises because its monetary policies were relatively conservative and, perhaps more importantly, because the period of rapid economic restructuring that took place over the last 15 years coincided with a dramatic increase in household demand for monetary assets. Other post-Socialist countries have been less fortunate, and China itself will find such fortuitous circumstances less forthcoming in the future.
29. In fairness, they have often acted at the behest of powerful local, global economic development-oriented Planning Commissions.
30. This message is elaborated on at great length in the author's report, *China: Urban Land Management in an Emerging Market Economy*, published by the World Bank as part of its "Country Study" series, in 1993.
31. Among recent precedents, see Spain and Portugal in Europe; Chile in Latin America; and Korea or Taiwan Province in Asia.
32. The World Bank has sponsored several research projects that attempt to explore this hypothesis. For a convenient summary see Alan GELB, Gary JEFFERSON and Inderjit SINGH, "Can Communist Economies Transform Incrementally?: China's Experience," Washington, D.C.: Policy Research Department Working Paper Series No. 1189, The World Bank, October 1993. Also useful is Michael W. BELL et al., *China at the Threshold of a Market Economy*, op. cit.
33. For a "warts and all" review of Shanghai's future role in China's development see Joe STUDWELL, "Something is Rotten in Shanghai," in *Asia Inc.*, Volume 2, Number 12, December 1993.
34. This in no way invalidates the very legitimate concerns that Hong Kong could be its own worst enemy, by omission or commission. The recent report produced by the Business and Professional Federation of Hong Kong, with Booz, Allen and Hamilton (*Hong Kong 21: A Ten-Year Vision and Agenda for Hong Kong*) provides a very comprehensive list of prerequisites for Hong Kong's future success.

# **CHINA'S DEVELOPMENT INTO THE NEXT CENTURY**





## 2

### SOME ISSUES OF CHINA'S LONG-TERM ECONOMIC DEVELOPMENT

*Jian WANG*

#### **CHINA'S ECONOMY HAS ENTERED INTO A NEW DEVELOPMENT STAGE - China Will Basically Complete Its Industrialization by 2010 and Will Become a Powerful Country in the World by 2020**

In terms of the economic growth pattern, China's ten year economic reform (1979-1988) was characterized by "a shift from heavy to light industry". This is to say, whilst in the 30 years before 1979, out of the three principle production sectors: agriculture, heavy and light industries, heavy industry was the main contributor to China's economic growth, there was a clear shift to agriculture and then to light industry after 1979. Such a shift in the growth pattern was closely related to the important adjustment in China's economic development strategies and the introduction of market mechanisms.

**Table 2-1 Proportion of Production Sector in Different Periods**

	1952-1978	1979-1984	1985-1988
Agriculture	19.4	35.0	20.0
Light Industry	33.2	34.3	40.5
Heavy Industry	47.4	30.7	39.5
Total	100	100	100

Source : *Statistical Yearbook of China*

From Table 2-1, we can see that there was an "abnormal" growth in agriculture in the period 1979-1984. A main cause of the high growth was the release of the long restrained agricultural productivity as the result of the economic reform in the rural system. Another reason was that the food consumption level of the residents was very low and the elasticity of the food demand was extremely high. For example, the average growth rate of the per capita expenditure for commodity of the urban residents was 7% per annum between 1981-1984, of which the growth in food consumption alone was 7.8%. Until 1984, of the consumption expenditure of the urban residents, the Engles Coefficient was still as high as 58%, which was an increase of 1.5% in comparison with that in 1981. In the same period, similar changes had been found in the structure of the expenditure for rural residents. Therefore it could be concluded that the great achievements of the agricultural production in this period was due to the emphasis in the reform of the rural economic system, as well as the change in the economic growth pattern with a shift from investment to consumption in the production demand.

The residents' food consumption demand was quickly satisfied by the rapid development in agricultural production. Therefore starting from 1985, major changes to the consumption structure of the residents occurred, in particular that of the urban residents. The Engles Coefficient of the consumption expenditure for residents in 1985 was 5.5 per cent point lower than that in 1984. At the same time, there was a rapid increase in expenditure for new types of durable household consumption goods: typically colour TV and washing machine. Between 1985-1988, the average growth in household consumption expenditure for urban residents was 18.5% per annum, of which that on goods for daily use and recreation were 30.9% and 28.3% respectively. In the same period, urban households with colour TV and refrigerator had increased by more than eight fold. This structural change and escalation of residents' consumption demand had led to the shift from agriculture to light industry as the leading industry for economic growth.

The two stage change in China's leading industry during the ten year economic reform basically followed the country's growth in consumption demand in light industrial products and the growth of the consumption industry. Owing to the over-heated growth in the economy, the Chinese Government started to tighten the macro economic growth from the fourth quarter of 1988. This had continued for the next three years, but the growth in light industry had sustained for quite a long time in the same period. However, after emerging from the drought of economic tightening, major changes in the growth pattern occurred in China's economy. Starting from September 1991, the leading growth trend of the economy, for the first time since reform, shifted

from light industry back to heavy industry. In that month, the growth rate of heavy industry was 0.5 percentage point over that for light industry but by December the same year, it was 2 percentage point higher. In 1992, the annual total showed the difference had reached 2.9 percentage points and for the first 9 months in 1993, the cumulative difference had reached a 3.8 per cent points. The share of heavy industry in the total industrial production, which was 50.7% in 1988, increased to 52.8% in 1992. This had further increased to 53.5% in the first nine months in 1993. The marginal proportion had actually reached 56.5%. All these had indicated that the role of heavy industry in the economic growth is getting increasingly dominant.

**Table 2-2 Growth Rates of Light and Heavy Industry in Different Periods**

	1952-1978	1978-1991	1992	Jan-Sept 1993
Light Industry	9.3%	14.0%	26.1%	22.1%
Heavy Industry	13.8%	10.6%	29.0%	25.9%

- Sources: 1. *Statistical Monthly Report of China, Industrial Statistical Bulletin*  
 2. The industry output value for 1993 does not include those enterprises that are below the township level.

In the 13 years after the economic reform in 1979, China's economic growth was dominated by light industry. However, after the 3-year retrenchment period, the predominant role shifted back to heavy industry. This had occurred was due mainly to a second time change and escalation of the urban residents' consumption structure. As the new generation of durable consumer goods represented by electrical household appliances were popularized in a short time, so the demand for these products had almost reached the saturation point in urban households. For example, by 1992, the possession of colour TV, refrigerator and washing machine per 100 households were 75, 53 and 83 respectively. History of residents' consumption in industrialized country have shown that after the stage of household durable consumer goods, residents consumption demand turn to housing, car and other top-grade goods. Since price of these consumption goods are expensive, people have to save money for a fairly long period. And in order to supply these goods, a strong heavy industrial base has to be established. Therefore, when a country arrives at such a development stage, there will be a relatively long period of economic development characterized by accumulation,

investment and growth of the heavy industry sector.

Resident's consumption in China, in particular that of the urban residents, has arrived at this stage since 1980. Results of the study on the saving trend showed that in 1988 there was only 7.4% of the residents want to save. However this had increased to 17.7% in 1992. In the period 1984 to 1988, the average increase in the volume of household savings was 58.2 billion yuan per annum, and this had increased to as high as 193.5 billion yuan per annum in the period of 1989-1992. The great increase in saving has become rich source for investment. The average annual growth rate of the total volume of fixed asset investment in the whole society in the period 1984-1988 was 25.7%. This had reached 37.6% in 1992. It was estimated that the size of total investment in 1993 would be more than 110 billion yuan, which corresponded to a growth rate of over 45%. The increase in investment has provided a strong pull for the growth of heavy industry and finally it will lead to the change of China's economic growth pattern. It is obvious that the reoccurrence of heavy industry dominant growth pattern in China's economy differed from that during the 30 years before the reform. Unlike the past when the Chinese government had given administrative bias towards heavy industry, the present changes in the economic growth pattern was affected by market demand and the function of market mechanisms.

Experiences of the industrialized countries have proved that there is a fairly long period of high growth in economy after the country enters the stage of heavy industry-dominant growth. Japan and "the four small dragons in Asia" had kept an average annual growth rate of GNP at about 10% after they entered this stage. Such high growth periods ranged from 17 years to 20 years. Having completed this stage, the main tasks of industrialization of a developing country are basically accomplished and the country is qualified to be a developed country. Since China has also entered the economic take-off stage, which is characterized by heavy industry-dominant economic growth, there will be a long period of growth at about 10% in the next 20 years. Following this course, then in the year 2010, China will exceed Japan and become the second strongest economic nation in the world, which means that the size of China's economy will exceed US\$4,000 billion at the 1990 value in 1990, and the per capita GNP will be more than US\$ 2500 when calculated on the basis of the present level of US\$ 500 and a total population of 1.4 billion. The share of heavy industrial output value in the total industrial output value will also be increased from the present 50% to 70%. Thus by then, China will have basically completed the tasks of industrialization.

Developmental economics suggest that one reason for the sustained high economic growth in developing country is that a great deal of production

elements remained in the agricultural sector with very low productivity before industrialization. In the course of industrialization, however, fund, land and labour force keep transferring from agriculture to non-agricultural sectors with higher productivity, thus leading to the long period of high growth in these developing countries. Presently, the share of agriculture has decreased to a quarter of the total industrial sector. But the proportion of labour force engaged in agriculture is still as high as 58%, or 350 million. The rich labour resource has made it possible for China to get very cheap labour almost without limitation at the crucial stage of the industrialization process. The process of rural industrialization in China will likely continue to the second decade of the next century, when the share of the agricultural labour force in the total industrial sector might reduce to about 5%. Due to this reason, the China's industrialization process may create a new world record, that is, the GNP growth rate could sustain a high growth rate of 10% per annum for the next 30 years until 2020. If this happens, and assuming that China's total population will reach 1.5 billion by the year 2020, then the per capita GNP could become US\$5,000 and the size of the Country's economy will reach US\$7,500 billion, and will surpass the United States and become the first in the World.

China was a powerful and prosperous country in the world in the Tang Dynasty. But it gradually lagged behind many countries since the Sung Dynasty. Today we see new prospects in China's economic development. We have all the reasons to believe that China will once again become an economic world power if her economic development can persist in the next 30 years. We should also note that in the history of mankind, there has yet a country or region, with more than 1 billion population, moving in full swing into an overall industrialization process. Therefore China's industrialization and modernization will surely have profound implications and effects on the world economy in the next century. And the Chinese people will be able to make bigger contribution to the development and progress of human society.

Nevertheless, there is no smooth path in the course of China's industrialization and modernization. Looking forward to the future, there are many difficult problems that we will have to face. Looking at China from an development angle, although China had made great achievements in her economic development in the 1980's, there are many major problems, such as the relationships between industry and agriculture, urban and rural, coast and inland as well as between industrial structure and the process of urbanization. Not only are these difficulties for the realization of long-term high speed economic growth, they will also become major concerns that will affect the Country's social and political stability if they are not resolved properly. Clearly, we will have to consider not only the positive, but also the negative

factors in the national economic development. In formulating strategies and long-term plans, we will need to adopt the right policies and measures to solve those problems.

**CHINA'S MARKET-ORIENTED REFORM HAS ENTERED INTO THE STAGE OF DEVELOPMENT OF THE MARKET PRODUCTION FACTORS AND BY THE TURN OF THE CENTURY THE TASKS OF THE REFORM WILL BASICALLY BE COMPLETED**

Since 1992, a second upsurge of reform in the economic system has occurred. The most striking characteristic is the development of the primary factors of production in the market. The so called primary factors of production are capital, land and labour. The immense interest in the capital market as reflected in last year's run for "stock and shares", "foreign currency" and "capital formation" suggests that capital has become a commodity in the market. Likewise, the run for "real estates" and "development zones" shows that land has become a commodity in the market. Of course, the country wide popular interest in "business" reflects the human resource has started to become yet another commodity in the market. That capital, land and human resource become commodity in the market reflects the formation of the primary production factor market (factor market). While commodity market is the elementary form of market economy, the factor market is the advanced form. During the first ten years of economic reform, China mainly developed a commodity market, including the consumption commodity market and the production material market. The development of a factor market which started in 1992 represented the advancement to a higher level market and suggests that China is not too distant away from the realization of the goal to develop a complete market economy.

The core of factor market is the money market. Without the money market, we will not be able to buy and sell shares, foreign currency exchange and real estate transactions nor capital formation. In the first ten years of reform we have constantly urged for the development of factor market but the efforts got no where because in the stage of light industry-dominant growth, most income has been used for consumption. So there was not enough surplus money in the society and hence it was difficult for China to develop a money market. As a result, the development of other markets has also been constrained as well. During the three-year economic retrenchment period, nevertheless, China's economic growth pattern had undergone a gradual change and as the

consequence, there was large amount of accumulation. And this has provided the conditions for the development of the factor market.

Objectively speaking, as we were unclear of the economic growth pattern and were unprepared psychologically for the change, we could not and did not foreseen such an important change has occurred. As a result, neither have we predicted nor prepared for major institutional changes arising from the changes in the economic growth pattern. Therefore the rapid development of the factor market since 1992 has occurred mostly spontaneously. That is to say the development has occurred without a clear government policy basis nor the guidance of law. Take the money market, which is the core of the factor market, as an example, the trading of stock and shares, and foreign currencies, all operated outside the state banking system. On the other hand, there has been no government initiative to open up the state banks to the market nor to convert them into commercial banks or carry out reform as enterprises. The same characteristics have been found in the development of the real estate market. Since the development of the different factor markets were all spontaneous, lacking the necessary macro-management and laws or regulations, they have caused serious chaos in the operation of the market and it in turn has led to major problems in the operation of the economy.

That there were chaos in the development of the factor market had resulted in many negative impact on the operation of the macro economy. This has shown that the institutional changes arising from the change to the growth pattern alone can not lead China onto a healthy course for developing a complete market economic system. Government initiatives are required to provide the necessary impetus for the economic system reform. In view of the above, the Chinese government has since May, implemented a series of administrative and policy measures to strengthen regulation and control at the macro level. Up till now, these measures have been very effective in attacking those against the law. Starting from the next year, reform will focus on the establishment of macro control system and property right at the micro level. These will cover the following five aspects:

1. *Financial system* - a number of sub-systems will be introduced, including (a) Division of tax between the central and the local government, (b) unification of enterprises tax, (c) establishment of turnover tax with the domination of value-added tax, and (d) the distribution system of the tax and the profits of enterprises;
2. *Monetary system reforms* - which include opening up the banks to the market, establishment of policy-lending banks and commercial banks;
3. *Foreign trade and foreign currency system* - the government will stop

the direct control over enterprises and the central planning for foreign trade, discontinue the rules and regulations for foreign currency reserves, and gradually implement free exchange of renminbi for foreign currencies in China;

4. *Enterprise system* - state-owned enterprises will undergo reforms on property rights according to modern enterprise system; and
5. *Price reform* - this will be further reforms on the basis of the present system when 95% of consumption commodity price and 85% of production material price are already priced at market level. In 1994, the control on the price of service products will be opened while production materials such as coal and petroleum, which are still under the unified control of the government will be opened to the market as well. Price for electricity and railway fares and freight charges will also be adjusted accordingly.

Through the above reforms, the economic system of China will be better matched to the requirements of a modern market economy. By the turn of this century, with further improvements of the reforms in the ninth five-year plan period, a new economic system which meets the requirements of market economy will be formed. By then, we can say that the tasks of the reform of China's economic system will have been basically completed.

### **CHINA WILL FACE MORE FAVOURABLE CONDITIONS FOR OPEN TO THE OUTSIDE WORLD FROM THE 1990'S TO THE NEXT CENTURY THAN IN THE 1980'S**

In the early 1990's, we saw the dismantling of the US-USSR super power regime, which had been in place for more than 40 years since the end of World War II. New world economic, political and military regions represented by the "European Market", and the "US-Canada-Mexico Market" are forming new groupings. Though the countries and regions in west Pacific region has not yet established such kind of international organizations, similar international regional market will be established sooner or later along with the growing tendency for establishing such markets in the world.

The successful development of China's economy in 1980's derives, to a great extent, from the successful open door policy. Objectively speaking, however, countries and regions (such as Japan and the Four Little Dragons in Asia) in the west Pacific regions have not changed their strategies of taking America and Europe as their major international market. Hong Kong is an



exception. Mainland China has had large amounts of investments from Hong Kong in the 1980's. However, the situation began to change starting from the mid-1980's. A new economic zone was forming. There has been stagnation or even decline of the exports of Japan and the four little dragons in Asia to America and Europe. For instance, Hong Kong's exports to America in 1991 was HK\$10 billions. Taiwan's exports to America also stagnated and declined beginning from 1987. While Japan's exports to industrialized countries stagnated since 1985 along with the revaluation of the Japanese yen. These changing factors will force Japan and the four little dragons to change their development strategies from US-Europe-oriented to Asia-oriented ones with special attention to China whose development has entered heavy industry-dominant stage and whose domestic market is expanding rapidly. The above changes will provide China with a more favourable condition for its opening to the outside world in the 1990's than it was in the 1980's.

There has been a southwards movement of the economic development centre in the 1980's. This is a result of the close division of labour in industries and connections in monetary and trade between Hong Kong and Guangdong Province which was gradually formed in the 1980's. Hong Kong's GNP is only twice that of Guangdong and yet Hong Kong has given great impetus to the development in the Pearl River Delta. One can image, once the development focus of Taiwan, Korea and Japan, whose GNP is 17 times as much as that of Fujian Province, 5 times of the total sum of Liaoning and Shandong Provinces and 7 times as much as that of China as a whole respectively, have been changed from America and Europe to Asia, and especially if they establish the economic relations like the one between Hong Kong and Guangdong, with China's coastal regions starting from 1990s to the next century, what a great impetus to the economic development China will get from these countries and regions.

If the "West Pacific Economic Zone" is to be established in the 1990's, then the economic centre of this region will be northeast Asia with Japan as its core. And at the early stage of its strategic change, Japan will inevitably put its strategic emphasis to Northeast China and the surroundings of Bohai. Northeast China and the surroundings of Bohai is the base for China's heavy industry. The economic growth pattern of China is changing in the early 1990's. The investment-guided readjustment of the demand structure has made the regional change of domestic demand from South China where is light industry dominant to Northeast and the Surroundings of Bohai where is heavy industry dominant. Since the conditions for China's opening to the outside world and the domestic demand directions are all favourable to Northeast and Bohai region, I think that both the economic centre and the centre for opening

to the outside world in China will begin to move Northwards in 1990s.

Changes have also been observed in the distribution of the areas for opening to the outside world since 1988. In 1988 the proportion of direct investment from foreign merchants in South China accounted for as high as 68%. It declined to 64% in 1991 while it kept stable in East China and increased by 4 percentage points in Bohai region in the same year. In 1992, it further declined to 57.3% in South China while it increased ten percentage points in East China. This is because foreign investors poured into Shanghai, Jiangsu and Zhejiang provinces. The growth of the investment by European countries and America is faster than any of the other countries and regions. In respect of the industries invested, there is a great difference between Hong Kong and European countries and America. Europe and America mainly direct their investment to industry. For example, of the 500 largest transnational corporations in the world today, 128 corporations have entered Pudong of Shanghai and plan to transform a number of industrial enterprise jointly with Chinese partners.

**Table 2-3 Proportional Distribution of Foreign Investment by Regions along the Coast**

	South China	East China	Bohai Region
1988	68.0%	11.5%	20.5%
1991	64.0%	11.2%	24.8%
1992	57.3%	21.9%	20.8%

Source : *Statistics Yearbook of China*

Note: South China includes Provinces of Guangdong, Guangxi, Fujian and Hainan; East China includes Shanghai municipality and Jiangsu and Zhejian provinces; Bohai region includes Beijing and Tianjing municipalities, Liaoning, Hebei and Shangdong provinces.

Although China is a large country, her large population has meant a very low natural resource availability on per capita basis. Therefore the resources needed in the course of industrialization have to be obtained by export-oriented development strategy. The resources needed for the industrialization in the North region can be obtained from the Northeast, North China and the Far East region of Russia. Resources in Southwest will be available for the demand of South China. It is difficult for East China to get the resources they needed within China. So they have to solve this problem by international exchange.

As Japan and the four little dragons in Asia all lack resources, it might be a better choice for East China to establish economic relations with European and North American countries instead of countries within the West Pacific Region.

Owing to the special industrial structure and the country's situation, to keep a fairly rapid growth rate for the long-term development in the future, China has to promote the development of foreign trade. The international environment in 1990s has also provided possible conditions for China to realize a fairly rapid development in foreign trade. In the eight years from now to 2000, if the annual growth rate of China's total volume of foreign trade remains at 11%, then the total volume of exports may reach US\$200 billions by the end of this century, that is 20% of China's GNP. It is expected that the total volume of foreign trade will be US\$400 billions by 2010 provided that the annual growth rate stabilized at 7% in the first ten years of next century. And the proportion of the total volume for foreign trade remains at 15% of the GNP.

China will continue to actively attract foreign investments in the course of her industrialization in the next 20 years, but when compared to the 1980's, this will be exercised with more careful policies. Along with the transformation of the economic growth pattern, China's domestic savings is increasing rapidly. According to "the World Bank Development Report, 1992", China's domestic saving rate was as high as 43% ranking second in the world, with Singapore on the top. Calculation based on China's statistics, China's domestic saving rate increased to 45.7% in 1992. This figure might be higher than that for Singapore. The Chinese have the tradition of hard work and thrifty and saving the money. The in-depth reforms of the insurance and welfare systems will further favours the increase of the saving rate. In this case, the financial resource for China's economic take-off should be mainly depended on the domestic accumulation. As for the foreign currency needed, it should be solved by expansion of exports. Thus China could avoid debt crises that was encountered by some countries in their industrialization process. However, prudent steps are not the same as conservatism, the government should encourage the utilization of direct foreign investments.

## **THE FUTURE ROLE OF HONG KONG IN THE ECONOMIC DEVELOPMENT OF MAINLAND CHINA**

The remarkable achievements of China's reform and opening to the outside world in the 1980's, and the economic achievements in South China in particular, are closely related to the influence of Hong Kong's economy. The tremendous impetus to the reform and opening to the world as well as to the

economic development in Mainland China given by Hong Kong is an important event in China's history. We should always keep in mind this experience and the outstanding contribution made by the people of Hong Kong.

Looking into the 1990's, we should be aware that owing to the changed or changing situations taking place both at home and abroad, Hong Kong is facing a number of strong challenges. Having transferred its modern light industry to the Pearl River Delta in the mid-1980's, Hong Kong had not taken up the road to upgrade its light industry to heavy processing industry but directly leapt over to the stage of service industrial development. Up to now, the proportion of Hong Kong's service industry has reach 80%. So the superiority of Hong Kong's economy is talented personnel in the commerce, finance, trade, real estate areas. Such characteristics of industrial structure is closely related to the economic connection between Hong Kong and the Pearl River Delta. Its a kind of division of labour, that is Hong Kong like the shop in front while the Pearl River Delta is the factory behind.

In addition to the impetus from Hong Kong, the great economic achievements obtained in South China in the 1980's was also due to the development of modern light industry which was just in keeping with the consumption demand in China at that time. Of the total industrial output value, the ratio between light and heavy industries of China as whole was 49.3: 50.7 in 1988 while that for Guangdong was 63 : 37. As it has been pointed out above, the economic growth pattern is changing greatly in early 1990s. Both demand and supply structure is heavy industry-oriented. This change is unfavourable to Guangdong whose industrial structure is light industry-dominant. There is a striking difference between South China and East China. East China has the largest heavy industrial city of China, that is Shanghai. Therefore having Shanghai as its powerful backing, the two provinces of Jiangsu and Zhejiang can continue its development of light industry. South China, however, lacks of heavy industry. It has to start from the very beginning if it want to develop heavy industry. If Hong Kong is expected to continue to be the economic centre in Guangdong or South China, she has to take consideration of the tendency for the change of growth pattern of China as a whole. Concerns should be given to the development of heavy industry both in Guangdong and other provinces in South China, namely Hubei, Hunan, Yunnan, Guizhou and Sichuan. Since there is no complete heavy industry in Hong Kong, there will be lack of technicians who have good command of heavy industrial technology and equipment. And, as a result, it will be difficult for Hong Kong to introduce heavy industries such as metallurgical industry, chemical industry, machinery, electronic and so on as well as

providing technical service for South China. Presently Hong Kong's tremendous influence on finance and trade on South China, to a great extent, depends on the transferring light processing industry to this region. Hong Kong's finance and trade influence to South China will be reduced if the close relations based on building heavy industry could not be established between Hong Kong and South China region in 1990. South China has to obtain heavy industrial technology from other countries and hence established monetary and trade relations with those countries. These factors are strong challenges for Hong Kong to keep its status of economic centre in South China.

— Besides, the issue as how to keep the present vitality of Hong Kong after 1997 when Hong Kong returned to China is also a great concern of many people. In a word, great changes will take place both in China and in the World. It is a common concern for the scholars both from Hong Kong and Mainland China to study on the continuation of Hong Kong's role to promote China's economic development in a new historical period with great changes in domestic and international environment.



# 3

## **TAIWAN'S OVERALL DEVELOPMENT PLAN INTO THE NEXT CENTURY**

*Len-kuo HU*

### **INTRODUCTION**

Taiwan's spectacular economic performance in the last three decades is well-known as the "Taiwan's economic miracle". It is now poised to move into the select club of the developed economies in the 1990s. The rise of Taiwan as a Newly Industrializing Economy (NIE) has entailed a long journey through a vast and diverse terrain of issues and debates. This long history of economic transformation has virtually paralleled with the government's ten economic development plans. Notwithstanding the debate concerning the role of government in the economic growth, the enviable track record witnesses Taiwan government's prudence in obtaining "high quality" public policies. The policy makers in Taiwan were not immune to policy mistakes but what sets them apart from those of other less successful economies is their consistent capacity to contain these mistakes from becoming protracted.

Government intervention began formally in 1953 with the first four-year plan. But the base of the island had been laid earlier with a "land to tiller" programme staged by the late president Chiang Kai-shek and perfectly in tune with the doctrines of Dr. Sun Yat-sen. Farm leases were extended to a minimum of six years; farm rentals were limited to a maximum of 37.5 percent of the average crop yield of the previous three years; public land was sold in easy installments to small farmers for a price only 2.5 times their annual crop revenue; and finally individual landowners had their land holdings limited and were compensated with government bonds. One result of this land reform was a dramatic increase in agricultural productivity. Another was that yesterday's landlord, armed with the collateral of his government compensation, became today's small businessman. By the end of the 1950s Taiwan has developed

canning and food-processing business, textiles industry and its own cement, plywood and glass factories.

During 1950s and early 1960s the government adopted the import substitution industrialization (ISI) policy to save precious foreign exchange. From then on the economic plan moved toward the export-oriented industrialization (EOI) with an aim to earn foreign exchange by increasing exports. With the 1960 Statute for the Encouragement of Investment, the government gave preferential interest rates for time deposits, soaking up the savings of the now-prospering peasantry, and then lent this money at subsidized rates to establish labor-intensive exporting industries. In 1966 the first export-processing zone was set up, attracting foreign investment, creating employment and adding to exports. By the end of the decade Taiwan has been able to sell to the world a shoddy but cheap assortment of radios, televisions, refrigerators, sewing machines, synthetic fibers, fertilizers and clothing.

In 1970s came the "second-stage import-substitution". This means the establishment of heavy industries, such as iron and steel and basic petrochemicals, to serve Taiwan's makers of toys, machinery and electrical consumer goods. It resulted in Taiwan being able to build its own cars and ships. In 1980s the "second-stage export-orientation" policy was adopted and the same decade saw the attempt of upgrading her market from pocket calculators to personal computers and from bicycles to scientific instruments.

However, the price of Taiwan's economic miracle is very high. The government's Council for Economic Planning and Development has pointed out that, "... amid rising prosperity and affluence, there have been signs of imbalance and dislocation, including traffic congestion, environmental pollution, a rising crime rate, and a lack of cultural and recreational facilities. Moreover, a tightening supply of low-skilled about and a declining work ethic are posing a threat to business activity and hampering the further improvement of the national quality of life." In 1991 the government announced a "Six-Year National Development Plan", costing at NT\$8.2 trillion (\$303 billion) and designed both to continue the miracle and to polish away the imperfections. If it is completely successful, by 1996 GNP per capita will have risen to \$14,000 a year. There will be clean air and water, swimming pools, sports facilities and country parks.

The Six-Year Plan is the biggest project of its kind in the world. It will attract foreign and domestic capital, and the attendant bankers, like a honeypot. Does it all sound too good to be true? May the past be an adequate guide to the economy's future? To answer the question we need to examine thoroughly the principles that govern the formation of Taiwan's policies so far, which will be described in section 2. Section 3 presents the eminent problems encountered



during its transition from a NIE to a developed economy, including its economic and political link with Mainland China. Challenges of the 1990s and the broad parameters of government policy up to 2000 as set out by the Council for Economic Planning and Development will be discussed in section 4. Some concluding remarks will be provided in section 5.

## **THE EMERGENCE OF TAIWAN'S ECONOMY**

The outstanding performance of the Taiwan's economy has attracted a lot of attention and many attempts have been made to understand the process of its development. This section briefly traces its graduation into a NIE.

### **The Take-Off**

According to Tsiang and Wu (1985) the basic condition for take-off is that savings per capita must be more than sufficient to maintain the capital/labour ratio. The three crucial factors in the successful take-off of an economy are the savings ratio, the capital/output ratio and the population growth rate. A country can achieve the take-off threshold by either raising the savings ratio, or lowering both the capital/output ratio and the population growth rate or by some combination of them. While raising the savings ratio entails a sacrifice of current consumption, the capital/output ratio can be lowered by improving the efficiency with which capital is employed.

Table 3-1 shows that the four East Asian NIEs achieved successful take-off by raising their savings ratios and simultaneously lowering population growth and improving the efficiency of capital. Taiwan had achieved a significant positive savings ratio in the early 1960s, taking off in 1963. Hong Kong and Korea had had a negative savings ratio until 1961, whereas Singapore had had a negative savings ratio until 1965. Accordingly, these three NIEs took off a few years later than Taiwan. It is noted that Taiwan had the highest capital/output ratio among the East Asian NIEs in the 1960s, implying inefficiency of capital use. It is primarily because Taiwan had followed an import substitution industrialization (ISI) policy in the post-war period until about the early 1960s. On the other hand, Hong Kong never followed ISI and Singapore's experience with ISI was very brief. Subsequent to ISI Taiwan government adopted the Export-oriented industrialization (EOI) policy which is subject to international competition and is likely to force efficient uses of capital.

**Table 3-1 Estimation of the Approximate Take-Off Year**

Year	Saving Ratio (a)	Capital/Output Ratio (b)	Population Growth Rate (c)	(a-bc)
Hong Kong				
1961	-5.2	1.4	3.0	-9.4
1963	2.5	1.4	3.5	-2.4
1965	7.2	1.4	2.7	3.4
1966	-	-	-	-
1967	10.2	1.5	2.6	6.1
1969	12.8	1.3	1.6	10.7
Korea				
1961	-2.3	2.3	2.9	-9.0
1963	3.9	2.2	2.8	-2.3
1965	1.9	2.0	2.6	-3.3
1966	7.0	1.9	2.5	2.2
1967	6.4	1.9	2.3	1.8
1969	14.8	1.9	2.3	10.4
Singapore				
1961	-15	1.5	3.7	-20.6
1963	-8.6	1.3	2.9	-12.4
1965	-0.1	1.4	2.7	-3.9
1966	4.1	1.3	2.1	1.4
1967	4.2	1.3	2.6	0.8
1969	9.0	1.3	1.5	7.0
Taiwan				
1961	8.0	3.6	3.3	-3.9
1963	13.4	3.2	3.2	3.2
1965	16.5	2.7	3.0	8.4
1966	-	-	-	-
1967	20.1	2.5	2.3	14.4
1969	22.1	2.3	2.5	16.4

Sources : Tsiang and Wu (1985).  
Chowdhury Anis and Iyanatul Islam (1993).



improved efficiency, resulting in a higher investment return and propensity to save. Furthermore, higher rates of export growth means less foreign exchange constraints on investment. As the foreign exchange constraint becomes less binding, the demand for investible funds increases which, in turn, encourages savings.

Analogous to the effect of exports on domestic savings foreign aid (or foreign capital inflow) relaxes the foreign exchange constraint and hence promotes growth and domestic savings. Taiwan received massive amounts of US aid in the early 1950s which financed up to 40 percent of imports of goods and services. It has contributed significantly to economic growth and price stability, thus creating a favorable environment for savings.

Government's fiscal position affects domestic savings via its impact on inflation and hence on private savings. Fry (1991) has found a clear positive relationship between the size of deficits and inflation. A rise in fiscal deficit may induce the private sector to anticipate a higher inflation rate and an increased level of current account deficit in the future. The private sector then adjusts its savings behavior as if it faced the problems of rising inflation and growing external debt. This may lead to capital flights and builds up the stocks of goods, precious metals and assets denominated in foreign currency. The ability of the Taiwan's government to pursue prudent fiscal, monetary, wages and exchange rate policies provided a stable macroeconomic environment with low inflation rates. A few episode of higher inflation largely due to external shocks were not allowed to persist for long. These policies have contributed to the high savings rate and rapid economic growth.

### **Industrialization and Structural Change**

The superlative growth of the Taiwan economy has been accompanied by extensive changes in its industrial structure. As can be seen in Table 3-3, the manufacturing sector has grown at a rate faster than GDP. The rapid growth in manufacturing provided the impetus for structural change. The shares of manufacturing in both GDP and employment have risen. The process of industrialization observed in the matured industrial economies suggests that the manufacturing sector follows an S-shaped curve (UNIDO). According to this hypothesis, the growth in the share of manufacturing in GDP declines after GDP per capita reaches a certain level. It appears that the structural transformation in Taiwan is following the same pattern. The dynamic role of the manufacturing sector is waning. It has important implications for industrial policy and interest group behavior. The manufacturing sector can try to maintain its influence and role either by a defensive policy of protectionism or by restructuring and technological development. In contrast to the matured

**Table 3-3 Taiwan's Production Growth and Its Structural Change**

Year	GDP	Agriculture	Manufacturing	Services
Growth rate (average annual %)				
1960-70	9.2	3.4	17.3	7.8
1971-80	9.7	1.8	12.8	9.0
1981-89	8.0	1.3	8.1	7.8
1992	6.6	-2.8	3.1	-
Share in GDP (%)				
1960	100	33.0	17.0	42.0
1970	100	17.7	33.0	41.4
1980	100	7.9	36.3	46.1
1990	100	4.0	34.0	53.0
Distribution of employment (%)				
1960*	100	56.0	11.0	33.0
1970	100	35.0	20.0	43.0
1980	100	19.5	32.7	47.0
1989	100	12.5	33.9	52.9

Sources : *Asian Development Bank (various issues).*  
 Chowdhury Anis and Iyanatul Islam (1993: Tables 1.4-1.6).  
*Taiwan Statistical Data Book (1993).*

Note : \*1960 figures are percentage of labour force.

industrial economies, Taiwan have chosen to follow the course of upgrading and restructuring.

Along with industrialization, the manufacturing sector has moved away from simple labor-intensive activities. Table 3-4 shows that the share of more complex activities like iron and steel products, chemicals, petroleum, machinery and transport equipments in manufacturing value added went up. At the same time, the importance of food, beverage and tobacco declined. In the 1980s the government adopted an industrial strategy with a special emphasis on high technology and skill-intensive activities (which included information, electronics, machinery and biotechnology). Accordingly, the electrical machinery and appliances industry grew substantially. There has also been

**Table 3-4 Structural Change in Manufacturing  
(Share in Manufacturing Value Added %)**

	1965	1976	1986
Food, Beverage, Tobacco	34.8	23.0	3.6
Textiles, Appliances, Leather, Footwear	15.0	17.2	17.8
Wood, Furniture	4.1	2.8	2.4
Paper, Printing	5.1	2.5	2.8
Chemicals	8.6	10.4	17.4
Petroleum, Coal, Rubber, Plastic	-	13.1	14.6
Non-Metallic Production	6.5	3.9	2.8
Basic Metals	2.2	4.7	9.2
Machinery	12.5	17.5	13.8
Transport Equipment	-	3.5	5.2
Professional, Scientific Equipment	-	0.8	0.8
Other	1.3	2.5	3.0

Sources : UNIDO (1985a, b) Taiwan: OECD (1988: Table T1).  
Chowdhury Anis and Iyanatul Islam (1993: Table 6.4).

substantial progress in the development of automation and precision machinery, especially tools and shuttle loom technology.

These structural changes are attributed to the policies that create competitive advantage rather than respond passively to comparative advantage determined by a country's initial set of endowments. Government policies were instrumental in switching Taiwan's industrial activities towards exportable ones in the mid-1960. The policies included a series of financial and fiscal measures aimed at liberalizing the financial market, reforming the exchange rate system with a view of facilitating the imports of machinery and industrial raw materials by exporters and providing export financing. The government also established export processing zones to attract foreign investment in the export sector - mainly textiles, agrofood and consumer electronics.

The Taiwanese government promoted the development of capital and technology intensive industries in the 1970s, broadening the country's industrial base. The shift in industrial emphasis was accompanied by a special effort to promote R & D activities by establishing publicly funded industrial parks. As a result of government emphasis on human resource development,

11.3 percent of the population 15 years old and over now has a junior or university education compared with only 4.4 percent in the mid-1960s (OECD, 1988).

Taiwan's industrial strategy underwent significant changes in the 1980s. One main thrust of these changes was to reduce overcapacity and make industries more flexible. The government scales down its industrialization plans and the authorities in shipbuilding and aluminum smelting industries revised their expansion plans downwards. The government also acted to rationalize production in state-owned enterprises and its role as an industrial entrepreneur was reduced. Another aspect of the industrial strategy in the 1980s is the expansion of high technology and skill intensive activities. These strategic industries included information, electronics, machinery and biotechnology.

### **Trade Expansion and Foreign Investment**

Because of the smallness of its domestic market foreign trade and investment have been a necessity for Taiwan's economic growth. The export growth in Taiwan has been much faster than its growth in GDP. From Table 3-5 one can see that the share of exports in GDP rose from less than 10 percent in the 1950's to more than 40 percent in the last two decades. The policy switch from ISI to EOI in the mid-1965s had contributed significantly to this growth. It is noteworthy that these merchandise exports are dominated by the manufactured goods excluding food and beverage & tobacco. In 1991-92 72 percent of merchandise exports were accounted for by the nonfood manufactured goods. This is phenomenal, especially when the nonfood manufacturing contributed only 15 percent to Taiwan's total merchandise exports in the 1950's.

Although Taiwan began its export drive with labor-intensive manufactured products, over time it has been able to shift the composition of its manufactured exports towards more sophisticated products. Table 3-6 presents the changing pattern of its manufacturing exports. It shows that the exports shares of electrical and non-electrical machines, and transport equipments rose from 15 percent in 1960's to 52 percent in 1991-92.

The World Bank (1987) offers the following four reasons why an outward trade orientation is likely to generate dynamic gains leading to a virtuous circle of growth: (1) export orientation is associated with high savings rate; (2) exports generate foreign exchange and facilitate imports of raw materials and capital goods; (3) exporting firms often benefit from foreign know-how and hence boost innovation; and (4) exporting firms must keep up with modern technology and bring managerial skills up to international standard to improve and maintain their market. So far, the empirical evidence on either demand-

Table 3-5 Merchandise Exports and Its Composition (Annual Average)

Year	GDP	Merchandise Exports	Agriculture	Industry Exports			
				Total	Food**	Non-Food	Others*
<i>Amount (US\$mm)</i>							
1952-60	1,764	134	11	123	99	21	3
1965-70	4,070	824	86	739	176	513	50
1971-80	19,784	8,661	299	8,362	708	5,918	1,737
1981-90	88,953	41,885	632	41,133	1,683	30,173	9,277
1991-92	193,784	78,824	672	77,652	2,709	56,858	18,085
<i>Share of GDP</i>							
1952-60	1.00	0.08	0.08	0.92	0.74	0.15	0.03
1965-70	1.00	0.20	0.10	0.90	0.22	0.62	0.06
1971-80	1.00	0.44	0.03	0.97	0.08	0.68	0.21
1981-90	1.00	0.47	0.02	0.98	0.04	0.72	0.22
1991-92	1.00	0.41	0.01	0.99	0.03	0.73	0.23
<i>Share of Merchandise Exports</i>							
1952-60							
1965-70							
1971-80							
1981-90							
1991-92							

Source : *Taiwan Statistical Data Book* (1993).Note : \*Others includes precision instrument, miscellaneous manufactures, mining and others.  
\*\*Food includes food, beverage and tobacco products.



**Table 3-6 Composition of Manufactured Exports (Annual Average)**

Year	1952-60	1965-70	1971-80	1981-90	1991-92
Manufactured Exports (US\$mm)	120	689	6,625	31,856	59,567
<i>Share in Manufactured Exports</i>					
Food, Beverage & Tobacco Products	0.83	0.26	0.11	0.05	0.05
Textile, Leather & Paper Products	0.09	0.45	0.44	0.32	0.25
Non-Metallic Mineral Products	0.01	0.04	0.02	0.03	0.02
Chemical Products	0.04	0.04	0.05	0.05	0.06
Basic Metals	0.03	0.04	0.03	0.03	0.02
Metal Products	0.00	0.02	0.04	0.08	0.08
Machinery	0.00	0.03	0.05	0.06	0.09
Electrical Machinery & Apparatus	0.00	0.11	0.22	0.32	0.36
Transportation Equipment	0.00	0.01	0.04	0.06	0.07
Total	1.00	1.00	1.00	1.00	1.00

Source : *Taiwan Statistical Data Book* (1993).

driven export-led growth hypothesis or the productivity enhancing role of trade liberalization is inconclusive. However, the commitment to free trade by the Taiwan government has closely linked its domestic fortunes to changes in world market conditions, a virtuous circle set in leading to a process of simultaneous interaction between exports and rapid economic growth.

External resources play a critical role in Taiwan's economic development. They can take several forms, such as aid, grants, borrowing and direct investment. Aid and grants are the main components of the official source of external finance and direct investment is the predominant form of private resource flows while borrowing can be either from official or private sources. Though aid and grants have played an important role in the early

industrialization, direct foreign investment (DFI) has dominated external financing since 1970 as can be seen from Table 3-7.

**Table 3-7 External Resources: Private Foreign and Overseas Chinese Investment and U.S. Aid by Year**

Year	Investment Case	Investment Amount	U.S. Aid
1951-60*	8	7,046	102,980
1961-70**	176	77,687	64,625
1971-80	154	215,917	-
1981-90	304	1,053,322	-
1991-92	400	1,619,897	-

Source : *Taiwan Statistical Data Book* (1993).

Note : \*1951-60 investment case and amount are the average of 1952, 55 & 60.

\*\*1961-70 investment case and amount are the average of 1965-70.

Given the predominance of manufacturing sector, it is hardly surprising that foreign investment is concentrated in manufacturing. According to Table 3-8 Direct foreign investment (including private foreign and overseas Chinese investment) in the manufacturing sector accounts for 71 percent of the total DFI. Next to manufacturing, the services sector attracts foreign investment the most and accounts for 26 percent of DFI. Despite the dominance of the food industry in the early years of industrialization, DFI in this industry was very insignificant (4 percent). This was perhaps due to the fact that technology in this industry is relatively simple and foreign firms do not possess firm-specific advantage. The table also shows that DFI closely followed Taiwan's shifting production structure. More advanced industries such as electrical, transport and machinery and chemical attracted more DFI as the importance of textiles, clothing and footwear declined.

Both foreign borrowing and direct investment have been an integral part of industrial and trade policies in varying degrees. In early phase, they were perceived to do primarily two functions: first, supplement domestic savings and relax foreign exchange constraint and thereby promote industrialization, and second, provide markets abroad and thereby integrate the domestic economy with the world economy. With the success in mobilizing domestic savings and export expansion in the late 1960s and early 1970s, the importance

**Table 3-8 Approved Private Foreign and Overseas Chinese Investment by Industry (1952-1992)**

**Amount Unit: US\$1,000**

	<b>Case</b>	<b>Amount</b>	<b>% of Total Amount</b>
1. Agriculture, Forestry, Fisheries & Livestock	83	36,792	0.00
2. Industry	3,811	11,832,007	0.72
2.1. Manufacturing	3,604	11,652,878	0.71
Food & Beverage	252	702,317	0.04
Paper & Paper Products	59	109,400	0.01
Textile	326	392,073	0.02
Chemicals	847	3,038,532	0.18
Non-Metallic Mineral Products	214	560,816	0.03
Metal Products	496	1,121,023	0.07
Machinery, Equipment & Instrument	376	1,330,091	0.08
Electronics & Electric Products	896	4,028,752	0.24
Transportation	138	369,874	0.02
2.2. Construction of Buildings	207	179,129	0.01
3. Services			
3.1. Banking & Insurance	153	1,163,241	0.07
3.2. Foreign Trade	1,255	1,138,714	0.07
3.3. Other Services	843	1,996,018	0.12
4. Others	428	324,637	0.02
Total	6,573	16,491,409	1.00

Sources : *Taiwan Statistical Data Book* (1993).

of these two functions of foreign capital has diminished significantly. However, in the latter phase of development foreign capital, especially DFI, still plays some crucial role in transferring technology and managerial skills and enhancing the technological capacities of the host country.

## **THE GROWING PAINS**

The natural consequence of this merchantilist-made miracle is that the Taiwanese have become rich but with the dear cost of rising wages, expensive land and housing, polluted air, water and soil, and inadequate sewerage and roads. The average Taiwanese is statistically three times richer than the average Malaysian - but the quality of life the ratio is reversed. We discuss below some major problems that hinder the continuation of its economic growth and await for a concerted effort by both the government and the people in Taiwan to overcome.

### **Internal Imbalance - Declining Domestic Demand Growth**

The declining growth in the domestic demand can be attributed to inadequate public infrastructure and sluggish private investment. Since the accomplishment of the Ten and Twelve Important Constructions in the early 1980, the government has not undertaken any significant public investment. The share of public investment in the GDP has since dropped substantially. The inability of infrastructural construction to keep pace with economic development has given rise to the emergence of economic imbalances and disorders one after another; especially traffic congestion, environmental pollution, inferior residential quality, noise, litter, uncertain drinking water safety, and deteriorating public safety, as well as inadequate cultural and recreational facilities and a decline of traditional Chinese ethic. All of these problems indicate that the ROC is faced with a developmental bottleneck: "poverty in the midst of affluence."

The slump in private investment may be attributed to a combination of economic and non-economic factors. The primary economic factors are an inadequacy of public facilities, including water, electricity, and transportation; difficult acquisition and high prices of industrial land; bottlenecks in the upgrading of industrial technology; rising labor costs and insufficient manual labor; and difficulty in obtaining financing. In the non-economic sphere, factors such as the widespread prevalence of politicization, the debate between unification and independence, the inadequacy of laws and regulations, the immature development of social movements, and the need to enhance administrative efficiency all produce a feeling of uncertainty in the business

sector and among the populace in general, and this influences their willingness to undertake long-term investment.

These insufficient domestic demands give rise to the acceleration of excessive savings. In essence, it reflects ineffective utilization of domestic resources, the consequences of which are the rampant speculation and soaring prices in the real estate and stock markets.

### **External Imbalance**

The major economic problem encountered by Taiwan in terms of foreign aspect is trading imbalance, especially the trade talks and economic/trading disputes resulted from the trading imbalance, such as intellectual property right, exchange rate, agricultural product trade, etc. Except in a few of years, Taiwan has been enjoying trade surplus after 1970's (Table 3-9). Since 1985, significant increase of the foreign exchange reserve in the Central Bank of China (CBC) was resulted from the hugh favorable trade balance. It has accumulated to more than US\$70 billions, which tops that of other countries in the world. Of course, this is a great achievement for a developing country. However, persistent augmentation of trade surplus and the continual accumulation of foreign exchange reserve can also bring forth a lot of problems, such as the significant increase of money supply. As the foreign exchange policy of the Central Bank of China to slowdown the speed of NT dollar appreciation and narrow the range of its fluctuation, CBC interferes with the foreign exchange market, absorbs a great amount of foreign exchange thus further increasing the net value of its foreign assets and aggravating the pressure on the increase of money supply and inflation.

The persistent augmentation of trade surplus will be in favor of the protectionism of the imported countries. Especially, as the trade deficit of the United States has incessantly expanded and Taiwan's excess of export in the trade with the United States (Table 3-9) is still high, the United States has considered Taiwan as its strong trading opponent and started to enact its new trade bill in August of 1988 to force the appreciation of NT dollar. Although the United States advocates free trade, under the pressure from both Houses and civil interest organizations, it has to protect such sensitive products as textiles, steel, and working machine on one hand and demand trading opponents to clear all trading obstacles and step up opening their domestic markets on the other. As to the trade imbalance between Taiwan and the United States, the United States is still in an attempt to take the advantage of trade negotiation, tariff negotiation and exchange rate negotiation for a complete, satisfactory and once for all solution.

It should be noted that the trade imbalance between Taiwan and the United States is resulted mainly from the imbalance of domestic production and expenditure structure of these two countries. It can not be once for all solved only the talk on trade or on exchange rate. The fundamental countermeasures are: Taiwan should (1) encourage private investment thus reducing the saving investment balance to a reasonable extent, and (2) compensate for the insufficiency of private investment and narrow the government's budget surplus even at the cost of deficit. As for the part of the United States, we strongly recommend that the United States should double its effort to improve the fiscal deficit and encourage private saving. Only through such a structural improvement can the trade balance problem be solved thoroughly.

Trade with Japan is just opposite to that with the United States. The United States is the largest market for Taiwan's exports while Japan is the largest market to supply the machines and raw material required by Taiwan. Due to geography and history, Japan's annual import has occupied more than 30 percent of our total import in the past 30 odd years (see Table 3-9). Such a proportion had been up to 45 percent in 1971. Except in 1952 and 1955 in which we had enjoyed favorable trade balance in the trade with Japan, all other years we suffered trade deficit. Also, since 1967, the unfavorable trade balance in the trade with Japan has exceeded the export to Japan. In order to reduce such an unfavorable trade balance, both the government and the trades have spared no effort in increasing the export to Japan and reducing the import from Japan. However, the result have not been satisfactory due to: (1) Most of the items imported from Japan are machinery equipment and upstream products. As the Japan products are cheap with good post-sale service, the traders are glad to buy regardless of Yen appreciation. (2) Most of the products exported to Japan are traditional products, such as banana, rice, sugar and textiles, which suffered from obstacles imposed by non-tariff measures. (3) We know little about the condition of Japan markets and the consumption habits of the Japanese.

### **The China Connection**

Since the late-president Chiang Ching-kuo lifted the 38-year-old absolute ban on visits to the Mainland on November 2nd 1987, the volume of indirect trade and investment has sprouted up. Owing to political concerns in Taiwan, the economic relationship between Taiwan and the Mainland China can only be undertaken indirectly via a third country. So far, approximately 70 percent of the trade across the strait is made through Hong Kong. As shown in Table 3-10, Taiwan's export to the Mainland has exceeded its imports from the Mainland since 1980. The former increases from US\$ 21 million in 1979 to

Table 3-9 Taiwan's Trade Development and Its Bilateral Relation

Year	Total Trade			Japan			U.S.		
	Import	Export	Balance	Import	Export	Balance	Import	Export	Balance
1952	187,215	116,474	-70,471	58,407	61,230	2,823	85,566	4,065	-81,051
1955	201,022	123,275	-77,747	61,235	73,322	12,087	95,543	5,400	-90,143
1960	296,780	163,982	-132,798	104,855	61,766	-43,089	113,108	18,853	-94,255
1966	622,361	536,270	-86,091	251,443	128,839	-122,604	166,335	115,885	-50,450
1971	1,843,938	2,060,393	216,455	827,023	245,029	-581,994	408,159	859,200	451,041
1976	7,598,931	8,166,340	567,409	2,451,499	-261,991	-1,356,745	1,797,540	3,038,699	1,241,159
1981	21,199,551	22,611,197	1,411,646	5,928,525	2,478,738	-3,449,787	4,765,763	8,163,099	3,397,336
1986	24,181,460	39,861,504	15,680,044	8,254,741	4,559,809	-3,694,932	5,432,594	19,013,878	13,581,284
1988	49,672,800	60,667,362	10,994,562	14,825,440	8,771,696	-6,053,743	13,006,725	23,467,169	10,460,444
1991	62,860,545	76,178,309	13,317,764	18,858,256	9,188,897	-9,669,355	14,113,788	22,320,844	8,207,056
1992	71,976,553	81,470,250	9,493,697	21,766,639	8,893,655	-12,872,984	15,771,032	23,571,604	7,800,572

Source : Taiwan Statistical Data Book (1993).

US\$ 6.3 billion in 1992, while the latter increases from US\$ 55 million in 1979 to US\$ 1.1 billion in 1992. In total, bilateral trade increases from US\$ 76 million in 1979 to US\$ 7.4 billion in 1992. Most of these increases occur after 1987. Note that the mutual trading reliance between each other has rapidly increased especially since 1987. In 1979 the export to the Mainland accounted for 0.13 percent of the total Taiwan's export and 0.14 percent of the total Mainland's import, these ratios increase to 7.72 percent and 7.80 percent, respectively in 1992. Similarly, the import from the Mainland accounted for 0.38 percent of the total Taiwan's import and 0.41 percent of the total Mainland's export in 1979. The ratios increase to 1.55 percent and 1.32 percent, respectively in 1992.

According to official estimates by the mainland China, the stock of Taiwanese investment in the mainland jumped from \$3.4 billion at the end of 1991 to \$9 billion at the end of 1992. The number of Taiwan-financed projects approved last year was greater than the 3,815 approved during 1983-91. Official guesses in Taiwan put the amount of cash rather higher, at \$15 billion-25 billion. It sometimes seems that every businessman in Taiwan has either set up a factory on the mainland or is thinking of doing so.

The flood of money disappearing into the mainland is causing problems for the Taiwanese economy. The local financial system has been drained of liquidity and the stockmarket has been falling. Because of the cash shortage, the government is having difficulty selling bonds to finance its huge six-year national infrastructure programme, which is likely to cost over \$300 billion. Up to now, the capital flow has gone mostly into moving sweatshop industries, driven out of Taiwan by rising wages and land prices. Recently, however, investors have been shifting into high-tech industry and property development which demand more capital. It gives rise to the fear and concern that the Taiwan's industrial base may be hollowed. On the political side, Taiwanese worry that the more money they invest in the mainland, the more vulnerable they will be manipulated by the mainland.



**Table 3-10 The Development of Indirect Trade Between Mainland China and Taiwan via Hong Kong (1979-1992)**

<b>Taiwan's Exports to Mainland China</b>				
<b>Year</b>	<b>Amount (US\$mm)</b>	<b>Growth Rate (%)</b>	<b>% of Taiwan's Total Exports</b>	<b>% of Mainland's Total Imports</b>
1979	21	-	0.13	0.14
1980	242	1,037.80	1.22	1.24
1981	390	61.08	1.73	1.77
1982	208	-46.65	0.94	1.08
1983	168	-18.98	0.67	0.79
1984	425	152.38	1.40	1.55
1985	987	132.13	3.21	2.34
1986	811	-17.91	2.04	1.89
1987	1,226	51.27	2.30	2.84
1988	2,242	82.81	3.65	4.26
1989	2,896	29.18	4.38	4.90
1990	3,278	13.18	4.88	6.14
1991	4,679	41.74	6.14	7.34
1992	6,288	34.39	7.72	7.80

**Table 3-10 The Development of Indirect Trade Between Mainland China and Taiwan via Hong Kong (1979-1992) (continued)**

<b>Mainland China's Export to Taiwan.</b>				
<b>Year</b>	<b>Amount (US\$mm)</b>	<b>Growth Rate (%)</b>	<b>% of Taiwan's Total Imports</b>	<b>% of Mainland's Total Imports</b>
1979	55		0.38	0.41
1980	78	40.65	0.40	0.43
1981	76	-2.82	0.36	0.35
1982	89	17.90	0.48	0.40
1983	96	6.77	0.47	0.43
1984	127	33.04	0.58	0.49
1985	116	-9.16	0.58	0.42
1986	144	24.25	0.60	0.47
1987	289	100.47	0.83	0.73
1988	478	65.68	0.95	0.98
1989	586	22.60	1.12	1.12
1990	765	30.41	1.40	1.23
1991	1,129	47.58	1.80	1.57
1992	1,119	-0.89	1.55	1.32

**Table 3-10 The Development of Indirect Trade Between Mainland China and Taiwan via Hong Kong (1979-1992) (continued)**

<b>Total Indirect Trade (Export &amp; Import) Between Mainland China and Taiwan</b>					
<b>Year</b>	<b>Amount (US\$mm)</b>	<b>Growth Rate (%)</b>	<b>% of Taiwan's Total Trade</b>	<b>% of Mainland's Total Trade</b>	<b>Trade Balance</b>
1979	76	-	0.25	0.27	-34
1980	320	321.05	0.81	0.85	164
1981	466	45.63	1.10	1.09	314
1982	297	-36.27	0.74	0.74	119
1983	264	-11.11	0.58	0.61	72
1984	552	109.09	1.05	1.07	298
1985	2,203	99.82	2.17	1.57	817
1986	955	-13.42	1.40	1.28	667
1987	1,515	58.64	1.54	1.83	937
1988	2,720	79.54	2.43	2.65	1,764
1989	3,482	28.01	2.91	3.12	2,310
1990	4,043	16.11	3.32	3.50	2,513
1991	5,808	43.65	4.18	4.28	3,550
1992	7,407	27.53	4.83	4.47	5,169

Sources : *Hong Kong Bureau of Statistics, Taiwan Monthly Statistics of Exports and Imports, Annals of China Statistics.* Kao Chun (1993).

## **PLANNING AHEAD**

Development of the Taiwan area has advanced with extreme rapidity over the past 40 years. At an annual average of 8.9 percent the economy has grown 17 times what it was 40 years ago. Besides providing our people with sufficient clothing and abundant food, this high rate of growth has left us with large amounts of products to export all over the globe. At this time of steady economic advancement and rapidly increasing affluence, however, the nation is faced with a number of problems. As mentioned above, the most serious of these are economic imbalance and a loss of social order, a failure of infrastructural construction to keep pace with rapid economic development, a general deterioration of the living environment. To accelerate public infrastructure and bring its people a higher standard of culture and quality of life, the government has promoted the Six-year National Development Plan.

### **Overall Economic Development Plan-General Thoughts**

The Six-Year National Development Plan is designed to address the problems discussed above and breakthrough the current developmental bottlenecks by accelerating infrastructural construction, augmenting basic hardware and software facilities, strengthening the nation's overall developmental foundation. The overall objective of the plan is rebuilding the economic and social order, and promoting balanced overall development. This overall objective will be met through the pursuit of four policy goals: (1) Raise national income, (2) Strengthen infrastructural construction, (3) Pursue balanced regional development, and (4) Improve the quality of life. Under the preconditions of economic growth and stable consumer prices, this plan considers the construction of industrial facilities, ample supply of production factors and their appropriate distribution. Moreover, promoting modernized industries will be balanced with due consideration in the regional development. It also creates a comfortable living environment surrounding industrial locations so that the quality of working, living and recreation activities can be improved in tandem. This will in turn promote economic prosperity, social harmony, cultural development and allow the country to meet its modernization objective at an earlier date.

### **The Six-Year National Development Plan**

The primary concept of the plan is to infuse traditional Chinese culture into economic development through the strengthening of public infrastructure, improvement of the structure of production, readjustment of regional development, establishment of living parameters, advancement of social

welfare and security, and augmentation of cultural and educational development. Following are the outline of the plan:

**A. *To Raise the National Income***

The goal of "raising the national income" is to boost the nations per capita GNP from just under US\$8,000 in 1990 to US\$14,000 in 1996, thereby ranking the ROC 20th on the list of the world's high-income nations.

*a. Maintaining Growth Potential, Avoiding Price Inflation, Strengthening the Infrastructure, and Promoting Economic Growth.*

The major strategy used to achieve this macroeconomic target is expansion of public investment and strengthening of infrastructural construction. Under the stimulation of government spending, domestic demand will expand and bring about an increase in imports, that will in turn reduce the nation's trade surplus and serve to improve its external economic imbalance.

*b. Ten Major Emerging Industries Will Improve the Industrial Structure, Eight Key Technologies Will Promote Industrial Upgrading.*

The industrial structure must undergo a rational readjustment in order to conform to changes in the socioeconomic structure. Agriculture production will continue to maintain a zero rate of growth, and manufacturing will concentrate mainly on capital- and technology-intensive industries. Service industries will face new development, with finance, insurance, transportation, communications, and other service industries that meet the needs of modern life and industrial development.

The "10 emerging industries" are high-tech industries that conform to the readjustment of the industrial structure and the raising of the level of technology. They are:

- 1) Telecommunications
- 2) Information
- 3) Consumer electronics
- 4) Semiconductors
- 5) Precision machinery and automation
- 6) Aerospace
- 7) Advanced materials

- 8) Specialty chemicals and pharmaceutical
- 9) Medical and health care
- 10) Pollution control

To promote the development of these 10 emerging industries and advance the upgrading of traditional industries, the government and the private sector will concentrate on the development of the following eight key industrial technologies:

- 1) Opto-electronics
- 2) Computer software
- 3) Industrial automation
- 4) Materials applications
- 5) Advanced sensing technology
- 6) Biotechnology
- 7) Resources development
- 8) Energy conservation

*c. Adjusting the Structure of Agriculture, Narrowing the Developmental Gap Between Urban and Rural Areas.*

In addition to focusing efforts on the advancement of high-tech industries and financial services mentioned above, agricultural production will undergo a structural adjustment, even as it maintains a zero rate of growth, toward a primary emphasis on productive activity with potential for market and technological development, with a high value-added, and with a low environmental cost. Besides, restrictions on farmland use will be relaxed, the efficiency of farmland utilization will be enhanced, and the rural infrastructure and living environment will be improved so as to narrow the development gap between urban and rural areas.

*d. Increasing the Ability of Traditional Industries, and Medium and Small Industries, and to Adapt to Changes.*

The modernization and sophistication of traditional as well as small and medium industries will be promoted, their financial structures reinforced, their operating systems improved, their funding channels strengthened, and mutual cooperation among them encouraged in order to improve their adaptability to change.

e. *The Economy is Steadily Maturing, a Financial Center for the Western Pacific is in Sight.*

With the economy steadily maturing, services are growing rapidly and have already surpassed industry to become the leading economic sector. Policy-wise, the government will relax unnecessary restrictions and reduce administrative intervention with the aim of bringing about an improvement in both the quality and efficiency of service industries. The focus of development will be placed on professional production services that can upgrade the level of the economy and on high-grade consumer services that can enhance the quality of life.

The service sector that has enjoyed the highest growth in recent years is finance, which has expanded at an annual average rate of 13 percent; this has made it not only the main force for development of the service industry, but also the key industry accelerating modernization of the economy. Over the six years of the plan, the financial system will be strengthened, financial liberalization promoted, and Taiwan built into a financial center for the Western Pacific.

**B. *To Strengthen Infrastructural Construction***

To strengthen infrastructural construction is the key of promoting industrial modernization and achieving the economic growth target. To promote industrial development, it is essential to carry out effective planning for and development of the necessary production resources and public infrastructure. Most important is an abundant supply of energy, water, land, and manpower, as well as close coordination in terms of transportation and telecommunications facilities.

a. *Assuring a Stable Supply of Energy*

Assurance of a stable supply of energy is one of the most important preconditions for future industrial development. Energy includes primary energy (petroleum, coal, natural gas, etc.) and indirect energy (electricity), and the most important of these are petroleum and electricity.

1) **Diversification of forms of energy and sources of supply**

Taiwan depends on imports for 99.5 percent of its crude oil, with about 80 percent coming from the Middle East. To ensure a stable

supply of petroleum in the future, the diversification of types of energy sources will be strengthened, imports of natural gas will be expanded, and investment in overseas oil fields will be encouraged in order to avoid possible shortages of the energy needed by industry.

2) Encouragement of energy conservation and development of substitute energy sources

Government agencies and state-run enterprises are taking the lead in carrying out a 10 percent reduction in their use of oil and water, and the private sector is encouraged to replace traditional industries having high energy consumption with emerging industries and to enhance the efficiency of energy utilization, all of which is helpful in coping with the trend toward gradually increasing energy shortages in the future. At the same time research into the development of new energy sources such as solar energy, wind energy, biomass energy, geothermal energy, and ocean energy will be strengthened.

3) Development of 10,000 megawatts of electric power in six years

The demand for electricity has maintained a rapid growth along with the economic expansion. The peak load in 1990 reached 14,510 megawatts; since the total net peak capacity was 15,730 megawatts, this left a reserve capacity of only 8.4 percent. To increase the reserve capacity to 20 percent, effect a major improvement of electric power supply, and cope with a possible peak demand of 21,030 megawatts by 1996, the total installed capacity must be boosted to 27,530 megawatts. To meet this target, the following generating plants will be completed during the plan period: coal-fired units one through seven of the Taichung thermoelectric power plant; gas-fired units at the Hsingta, Nanpu. Tunghsiao, and Talin power plants; oil-fired units at Linkou and Penghu; and the Mingtan pumped-storage hydroelectric power plant. Construction of the fourth nuclear power plant and the Suao coal-fired power plant will be carried out as soon as they win greater public support.



4) Rapid increase in the ratio of electricity generated by low-polluted natural gas

The structure of installed electric power generating capacity will be adjusted so that by 1996 relatively low-polluting gas-fired power plants will be heightened to 19 percent of the total, compared with 4 percent now. By that time the facilities at the Yungan liquified natural gas receiving station will no longer be adequate, and a second LNG receiving station will be added in northern Taiwan.

*b. Development and Conservation of Water Resources*

In 1990, the total demand for water in Taiwan was approximately 18.9 billion tons, and by 1996 the figure is expected to exceed 20.2 billion tons. Industry will account for the largest portion of the increase. Sixty percent of Taiwan's total water demand is currently supplied from rivers, while the rest comes from reservoirs and wells. Water supply and demand are roughly in balance at present; in long periods of drought, however, water shortages can occur in some areas.

Future development of water resources will be extremely difficult, primarily because most usable water resources have already been developed and favorable sites for reservoir construction are few. More important than the development of new water sources is the proper management and conservation of watersheds as well as the prevention of continued pollution of streams and rivers and eutrophication of reservoirs. Besides continuing the implementation of various control plans for existing reservoir watersheds, the following projects will be carried out in general watershed areas: reforestation of 22,000 hectares, soil and water conservation on 12,000 hectares, landslide control, wild river control, and flood-prevention engineering.

The prevention of pollution in the mid-and-down stream areas of rivers is especially important for those who use those areas as a source of household water. During the six-year plan period, the government will invest a large amount of funds in the rectification of 10 rivers: the Tanshui, Erhjen, Houchin, Tienpao, Tungkang, Peikang, Putsu, Chishui, Chienchen, and Tungshan. Other related projects are the completion of sewage systems so that waste water can be collected and treated before it is released into the rivers. In addition, control of waste water from factories and pig farms in the drainage basins will be strengthened and a regional garbage treatment plant will be built so

that towns and villages in the basins will no longer use the riverbeds as garbage dumps. This will improve the quality of the water and permit the supply of drinking water that is up to standard.

Because of increased consumption of water Taiwan's reservoirs are evidencing an inadequacy of total water storage capacity. Because of this situation, the Liyutan reservoir, Nanhua, and Mutan reservoirs will be completed by 1996, adding approximately 720 million tons of water annually. Planning will also be strengthened for the Meinung, Pinglin, Hsinshan, Second Paoshan, and Chienmin reservoirs.

*c. Rational Planning and Utilization of Land Resources*

Rational planning and utilization of land resources is conducive to industrial development and the promotion of balanced regional development. In the developmental trend of future, it is clear that agricultural growth will slow down while industry and commerce will maintain a continuous growth and service industries related to public recreation and leisure will experience booming development. To accommodate the expansion of industry, commerce and service in the plan period, it will be necessary to shift farmland to the use by these sectors.

Among the most important tasks of the six-year plan will be preparing for the establishment of high-tech industrial zones and integrating local scientific and technological resources. In addition to expanding the current Hsinchu Science-based Industrial Park and establishing a science technopolis at Hsinchu, in the future suitable areas will be selected for the establishment of three or four high-tech industrial zones that will help turn Taiwan into a technological stronghold. Other major tasks include the continued planning of coastal industrial zones and the relocation of polluting factories that are still located in the Taipei and Kaohsiung areas so that the polluting situation can be improved.

The large amounts of land for filling the needs of various industries and of urban development will be supplied through the conversion of farmlands. The provision of 900,000 housing units, mixed commercial-industrial zones on the peripheries of the living perimeters' central cities, city parks, recreational and leisure facilities of various kinds, industrial lands, and major transportation facilities will all need to use land of more than 28,000 hectares that has been converted from agricultural use.

d. *Proper Planning of Manpower Resources*

To promote the development and utilization of manpower resources, an overall upgrading of the quality of education at various levels will be carried out with the aim of cultivating high-quality manpower; the concept of lifetime career education and training will be established, and adults will be offered the opportunity for further education and training; and the standard and quality of vocational training will be heightened and the business sector will be encouraged to carry out vocational training so as to bring about full development of the manpower potential. In addition, employment services will be strengthened and the service network expanded, and working conditions will be improved, with the aim of promoting labor-management harmony and stimulating the willingness to work so as to assure an adequate supply of the manpower resources needed for industrial development.

e. *Strengthening the Development of Transportation, Establishing a Transportation Hub for the Asian-Pacific Region, and Strengthening the Development of Telecommunications.*

To support the development of industry and the rational distribution of population, major transportation construction projects, including the second freeway, high-speed railway, and other rapid transit systems, will be carried out. This construction will utilize approximately 6,860 hectares of farmland.

The integration of international and inland transportation will be strengthened. West Pier 19 improvement at Keelung Harbor will be done in coordination with high-speed roads providing access to the harbor. Similarly coordinated projects are also planned for Kaohsiung and Taichung Harbors. The feasibility of building harbors at Tanshui, Mukua River, and the Kuanyin Industrial Zone will be studied, as will the possibility of expanding Anping Harbor. In the area of marine shipping, there are plans to establish a marine transport management system and to expand the international container fleet. The completion of these plans, added to Taiwan's favorable geographic position, will help make the island a transportation hub for the Western Pacific.

In addition, telecommunications construction will be accelerated, information services will be reinforced, and digitalization of the telecommunications network will be strengthened so that Taiwan can become a switching center for telecommunications in the Asian region.

### ***C. To Pursue Balanced Regional Development***

Taiwan is divided into four regions: northern, central, southern, and eastern. Aside from the two metropolitan areas of Taipei and Kaohsiung, the northern region has developed most rapidly; in the other three regions, development has been relatively slow. The primary reasons for rapid development of and the concentration of population in the northern region are an abundance of job opportunities, high incomes, and good public facilities for education, culture, and medical care. The change in the industrial structure will help to increase job opportunities and equalize incomes in slowly developing areas, and to slow down the population outflow from those areas. During the six-year period, major improvements will be made in the supply of water and electricity, fire prevention, drainage, transportation, and housing facilities in slowly developing areas; these improvements, together with the establishment of living perimeters, will narrow the developmental gaps among different regions.

#### ***a. Implementing National Health Insurance and Completing the Higher Education Network***

Educational, cultural, and medical care standards in the slowly developing areas will be greatly improved over the six-year period. In coordination with the implementation of national health insurance in 1994, a national medical care network plan will be carried out with the government to build new public hospitals and expand old ones, and establish a medical care development fund to provide for the rational development of medical care resources and narrow the gaps between regions. Private interests will be given incentives to invest in the construction of hospitals in areas that have a shortage of medical care resources. This will increase the number of hospital beds in Taiwan from 26.4 per 10,000 people in 1990 to approximately 30 beds per 10,000 people in 1996.

Higher education networks will also be established in the northern, central, southern, and eastern regions, including the building of 25 colleges and universities (with at least one new university in each region). To increase the opportunities for junior high school graduates to advance up the education ladder, 27 new senior high schools will be established. One national experimental senior high school for the arts will be established for those with special artistic talents, and five more special-education schools will be set up for mentally handicapped. To achieve the goal of lifetime education, the promotion of adult

education will be strengthened through the establishment of six schools for ongoing adult education. Preparations will also be made for the establishment of social education agencies and the enrichment of cultural funds in the four regions.

*b. Planning the Construction of New Towns, and Alleviating Excessively Dense Metropolitan Areas*

With rapid industrial development, the quality of life in areas of concentrated population has been affected by high residential density, congested traffic, air pollution, and the heavy burden on public facilities. To achieve these problems through a dispersal of population and a rational distribution of industry, new towns (or new communities) will be planned for construction at suitable locations. Mass rapid transit systems will be built in metropolitan areas, and urban commuter rail facilities will be strengthened. Urban area expressway systems connecting all medium-sized cities within a region will make intra-regional transportation more convenient.

*c. Establishing Express Transportation Systems, and Achieving a One-day Transportation Perimeter*

The goal of transportation development is to build Taiwan into a one-day transportation perimeter. Expressway systems within the different living perimeters will be rebuilt with the aim of integrating urban and rural life. To achieve this goal, high-speed transportation systems must be established:

- 1) High-speed railway: The high-speed railway will stretch 344 kilometers, from Taipei to Kaohsiung, and will be able to travel that distance in an estimated 93 minutes.
- 2) Around-the-island freeway network: This includes the widening of the Hsichih-Wuku and Yangmei-Kaohsiung sections of the existing Sun Yat-sen Freeway, construction of the northern section of the second freeway and the Taipei-Ilan freeway, and planning of the southern cross-island and eastern Taiwan freeways.
- 3) West coast expressways: This involves the upgrading of provincial highways Nos. 2, 15, and 17 to expressways.
- 4) Twelve east-west expressways.

In addition, existing provincial roads and major county roads will be improved and widened. An around-the-island rail network will be

completed. The major tasks in this plan are completion of the South Link Railroad and improvement of existing railroads through double-tracking, heaving-tracking, or under-grounding.

*d. Planning of Metropolitan Mass Rapid Transit Systems*

Transportation construction in metropolitan areas is concentrated primarily on mass transit systems. Taipei's initial MRTS network is projected for completion within the six-year period, and a long-range plan calls for construction of a route from Taipei to Chiang Kai-shek International Airport. Planning and design work will be completed for four routes in the Kaohsiung metropolitan area, and two routes in the Taichung and Tainan metropolitan areas, respectively. In addition, a mass rapid transit route between the two cities of the Taoyuan-Chungli metropolitan area will be planned and designed, and planning for two lines in the Hsinchu metropolitan area will be carried out.

These adjustments of the gaps in regional development; planning for balanced regional development; strengthening of infrastructural construction as well as medical care, cultural, and educational facilities in isolated areas; and the shortening of distances between regions through transportation construction are all important strategies for the promotion of balanced regional development over the six-year period.

***D. To Improve the Quality of Life***

The objective of "improving the quality of life" is for the people of Taiwan to achieve an average per capita income of US\$14,000 after the completion of the six-year plan; and, at the same time, to enjoy a healthy, secure, and comfortable quality of life, thereby breaking through the developmental bottleneck of poverty amidst wealth and truly achieving an affluent country with affluent people. In pursuit of this objective, the following three major tasks will be carried out: (1) planning the development of living perimeters; (2) advancing social security and welfare; and (3) improving the quality of the environment.

*a. Planning the Development of Living Perimeters*

The development of living perimeters is the most important characteristic of the six-year plan. Living perimeters are centered around the human being, and their planning and development is focused on six major areas of human activity: work, housing, leisure, schooling, medical care, and shopping. The basic concept of living

perimeters is to divide Taiwan into 18 perimeters to serve as units for substantive planning and development. In general, these living perimeters will take the administrative areas of existing prefectures or counties as their compass. In the planning of each living perimeter, full consideration will be given to the development of the residents' working environment, housing, recreation and entertainment, education and culture, medical care systems, shopping facilities, and transportation networks.

Transportation networks will be designed so that a person living anywhere will be able to reach the nearest metropolitan area in no more than one hour and the central city in his own living perimeter in no more than half an hour. Each township will have a library and swimming pool, and each neighborhood will have a children's playground. Residents of each living perimeter will be able to reach a museum or art gallery in an hour or less. More universities, colleges, and senior high schools will be built. Medical care networks will be developed in line with the implementation of national health insurance. To facilitate the introduction of new job opportunities and the adjustment of the industrial structure, suitable locations within each living perimeter will be chosen for the establishment of industrial zones. Over the six years 900,000 units of new housing will be built, and for this purpose approximately 10,000 hectares of farmland will be rezoned for residential use. Each perimeter will construct large, modern shopping centers that concentrate the functions of shopping, recreation, culture, entertainment, dining, medical care, exhibition, and information in one place.

*b. Advancement of Social Security and Welfare*

The advancement of social welfare and the maintenance of social security are intimately linked to the socioeconomic development of the nation and the well being of the people. In view of the weakening of the mutual-help function of the traditional household, as well as the aging of the population and the slowing down of population growth, it has become necessary to strengthen care for the impoverished, infirm, the disabled, the aged, and the unemployed. Besides, the change in social values, the decline of traditional moral standards, and the deterioration of the work ethic have brought about a steady deterioration in social order and a continuous stream of major crimes - a situation that calls for urgent rectification and the reestablishment of social order so that socioeconomic development can proceed.

In line with the implementation of national health insurance in 1994, medical care networks will be built up throughout Taiwan and medicare will be introduced so that medical insurance in the ROC will attain the standard of that in the advanced countries. For social security payments to the aged, disabled, and surviving dependents, an annual payment system should be adopted in substitution for the lump-sum system so as to fulfill the function of long-term care. In addition to the accomplishment of social relief, the emphasis in the future development of social welfare work will be on the welfare of disadvantaged groups that are now receiving increased attention every day: the aged, the handicapped, the young, and women.

Assured employment and job safety also bear a heavy relationship to social welfare. Over the six-year period, the prevention of occupational injuries will be strengthened, the working environment will be improved; and, with the coordination of vocational training and employment services, a comprehensive employment security system will be built up year by year. Other important tasks are the prevention of natural disasters and the preservation of social order.

*c. Improvement of Environmental Quality*

Environmental protection can be divided into two major categories: prevention of pollution, and preservation of nature. Air and water pollution were the earliest felt, and are the most seriously considered, of all pollution problems. Major strategies for improving air quality over the six-year period include:

- 1) improvement of the quality of factory boiler and automobile fuel, and reduction of the sulfur content of petroleum products so as to lower the amount of sulfur dioxide pollution, (2) overall promotion of lead-free gasoline and the installation on automobiles of catalytic converters so as to reduce nitrogen dioxide and ozone pollution, and (3) control of automobiles maintenance and exhaust standards, and strengthened control of dust from construction work, and (4) establishment of basic data and air pollution data on more than 5,000 factories, setting up of an automatic on-line computerized monitoring network, and addition of more air quality monitoring stations.

One third of all garbage in Taiwan is discarded in river beds, creating one of the major causes of pollution of the island's rivers. To reach the minimum 85 percent target for proper garbage



disposal, the incineration ratio should be boosted from the current 1.4 percent to about 50 percent, 21 incinerators, 55 ordinary landfill areas, 23 regional landfill areas, and one garbage compost field will be constructed.

Compared with the prevention of pollution, the preservation of nature is work that deals with the source of problems. In addition to strengthening watershed management and increasing the area of reforestation, in the future the volume of logging will be strictly limited, the cutting of old-growth cypress prohibited, protection forests expanded, and forest area patrols, enforcement against illegal farming and logging, fire prevention, and disease and pest control strengthened.

### **Economic Prospects of The Plan**

After this plan is completely executed, the economic slowdown will be reversed and the economy will take on an entirely new look. The various economic targets that the six-year plan will achieve are described as follows:

#### ***A. Maintaining Stable Economic Growth***

Over the last four decades, the economy has grown at an annual average of 8.9 percent. In the future, it will become increasingly mature and population growth rate will steadily decline. Taking into account the growth of labor forces, accumulation of capital and technological progress, the economy can still grow at an annual rate of 7.5 percent during the plan period. However, to avoid excessive wage increases and inflationary pressures stemming from the excessive economic growth, the plan sets an initial target growth rate of 7.0 percent, a rate slightly lower than the economic potential so that the government's goal of growth and stability can be equally maintained.

Consumer price index rose 5.0 percent in 1991. During the plan period, it will keep this index from rising above an average of 3.5 percent. As a result of heavy investment in the public infrastructure, domestic demand will be expanded at the risk of higher inflation rate. However, businesses will possess the basic facilities they need which will amply provide them with productive resources that will in turn reduce costs and moderate inflationary pressures.

## ***B. Equitable Adjustment in the Overall Supply and Demand Structure***

### *a. Demand Structure*

During this plan, increases in the public fixed investment have been set at an annual real growth rate of 15.5% for the government sector and 8.9% for the state run enterprises. Both exceed the targeted economic growth rate. Furthermore, to raise the quality of public services and to improve various software development projects, government consumption will continue to rise at a real annual growth rate of 7.3%. As a result, total government expenditures will rise from 27.7% of GNP in 1990 to 30.8% in 1996. Spurred by this rise in public expenditures, domestic demand will grow at an average annual rate of 8.3%, higher than the target economic growth rate. This rise relative to GNP not only will make the economy more self sufficient and lessen the impact of foreign demand, it will also strengthen the demand for imports. Because of the recessionary trend in the international economy, export growth has moderated. It will continue to reduce our surplus in goods and services and further improve overall trade imbalance.

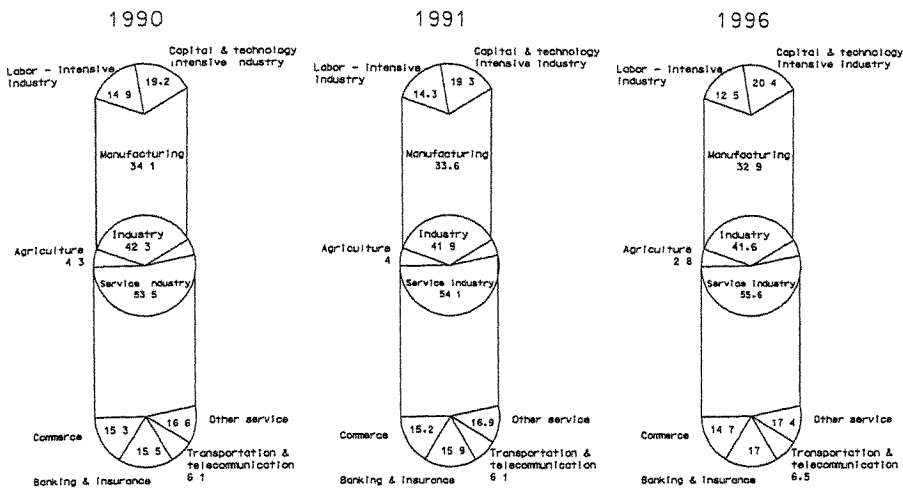
### *b. Supply Structure*

In the six years to come, the social and economic structure will undergo a continual transformation. The service sector is coming of age. With its average annual growth rate set at 7.8%, it will be the primary source of economic growth. The industrial sector's growth rate has been targeted at 6.9% of which 6.7% for manufacturing. In the manufacturing sector, the growth rate of capital and technology intensive industries will reach 8.3% and only 4.1% for labor intensive industries. Agriculture has been heavily affected by internal and external environmental changes and natural conditions. So, to conserve national land and resources, its growth rate should be maintained at zero percent.

Each sector's share of domestic GNP are as follows (Figure 3-1):

1. Agriculture: From 4.3% in 1990 to 2.8% in 1996.
2. Industry: To decrease from 42.3% to 41.6% of which the manufacturing sector will decline from 34.1% to 32.9%. In addition, improvement shall be seen in the internal structure of manufacturing. The percentage of

**Figure 3-1 Proportion of Domestic GNP by Sector**



capital and technology intensive industries in overall manufacturing will rise from 56.2% in 1990 to 62.0% in 1996 and labor intensive industries will rise from 43.8% to 38.0%.

3. Services: To rise from 53.5% to 56.6% of which insurance, transportation, communications and other services growth will rise quickly in response to modern lifestyles and industrial development needs. Commerce will enjoy consistent steady growth, yet its percentage on GNP will drop slightly.

**C. Expansion of Government Fiscal Deficit**

The government is aggressively involved in a large number of hard (i.e., highways, railways) and soft (communications, personnel) public investments to strengthen public service capabilities. Also, interest payment for debt services and transfer expenditures increase. As a result, the overall government expenditures grow at a faster rate than its receipts. The majority of financial resources for the plan will come from the issuing of public debt and borrowing on credit. Accordingly, the fiscal deficit will widen significantly.

*a. Government's Current Expenditures*

Government's current expenditures will increase from 819.8 billion in 1990 to 1,580.1 billion in 1996 with an average growth rate of 11.6%. Besides increased outlays in education & culture, environmental protection, health insurance, regional development, and social benefits, salaries and benefits for the military, civil servants and teachers will be improved. Government consumption expenditures will rise from 744.0 billion in 1990 to 1,410.2 billion in 1996 with an average growth rate of 11.3%. Also, in 1991, transfer expenditures of 110.9 billion were outlaid for broader participation in international economic activities and handling veteran land warrant claims.

*b. Government's Current Revenues*

In the coming six years, the government will be actively enacting taxation, reforms, revising tax policy and establishing a sound, comprehensive tax system to expand the tax base and promoting fair distribution of the tax burden. As a result, tax revenues will steadily rise at an annual rate of 10.2%. In addition, government's asset returns and corporate profits and transfer income will increase at annual rates of 9.0% and 11.3%. Total government revenues will increase from 1,026.0 billion in 1990 to 1,830.9 billion in 1996, a nominal annual increase of 10.1% which is lower than that of the increase in expenditures. Taxation as a percentage of GNP will drop from 20.1% in 1990 to 19.5% in 1996 which will imply a lower tax burden for the average taxpayer.

*c. Government's Savings*

Government's savings is the surplus of current revenues over current expenditures and is a major source of government's investment expenditures. During this plan, government's savings of 206.3 billion in 1990 will rise to 250.8 billion in 1996 and will drop from 4.8% to 3.1% of GNP. In the future, government's savings will not be sufficient to cover the large increases in government's fixed investment. Instead, large amounts of government bonds will be issued and borrowing on credit must be done; therefore, government's fiscal deficit will rise along with the plan.

***D. Effective Utilization of Domestic Capital***

During the plan, the supply of domestic capital should steadily increase. Through the aggressive promotion of various government's development projects, the public's incentive to invest will rise in step. In consequence, demand for capital will rise at a faster pace than capital supply. Thus, savings as a percentage of GNP will shrink and the high excessive capital supply in the past will be improved over time.

*a. Capital supply*

The continual rise in per capita income will induce private savings to rise continuously. However, the establishment of a nationwide health insurance and social security system shall lower the willingness to save by the public. The savings rate (i.e., the private savings as a percentage of GNP) will continue to decrease. This average rate over these six years will be 29.3% which is lower than the average in the 1980's.

*b. Capital Demand*

As the public investment projects are further promoted and the domestic investment environment improves, the incentive of private investment should rise which in turn strengthen domestic capital demand.

*c. Net Savings*

Because capital demand will outstrip capital supply, net savings of 347.5 billion in 1990 will drop to 137.7 billion in 1996. As a result, the net savings as a percentage of GNP will drop from 8.0% to 1.7%.

***E. Developments in Balancing External Trade***

*a. Moderate Export Expansion*

In the beginning of 1990's, it was predicted that the rate of expansion in global trade will decrease, especially considering the outbreak of the Persian Gulf crisis, the jump in oil prices and the general credit tightening measures taken by central banks in many countries. Therefore, growth in international trade will be affected and will have

a negative impact on the country's exports. Moreover, because of the active measures being taken to promote upgrading of industries and raise economic efficiency, there has been gains made in industrial productivity and overall foreign competitiveness. In the meantime, the trade policy of diversifying markets will be continuously implemented, marketing efforts by companies will be strengthened to open up markets abroad and improve trading structures. Nevertheless, the rate of export expansion will be moderate compared to the years past. The merchandise exports are estimated to increase at an annual rate of 6.9%.

*b. Imports Rising at Relatively Fast Rate*

As a result of the expansion in domestic demand, imports of products over these six years will increase at an average annual rate of 10%, a rate higher than that of exports.

*c. Trade Surplus Decline*

The influx of goods and services will grow relatively faster than their outflows and this will cause trade surplus to gradually shrink, from US\$ 9.77 billion in 1990 to US\$ 1.36 billion in 1996 and from 6.1% of GNP to 0.5%.

### **The Mid-Term Revision of the Six-Year Plan**

Since the implementation of the Six-Year National Development Plan, capital provided for the need of domestic investments has serious fell short of the original expectations, especially with respect to the decrease in government's current account, i.e., the surplus of current receipts minus expenditures (or government savings). This has resulted in insufficient financial resources to cover public works investment. Coupled with labor, material and land shortages, the implementation of this plan has fallen behind schedule. In order to balance out the supply and demand of domestic financial resources, it has become exceedingly difficult to attain the original goals of 7.0% economic growth and a 3.5% consumer price inflation. After further evaluation in the domestic/foreign objective and subjective economic environments as well as the shortages that exist in capital, labor, material and land, the general economic development objectives have been revised over the next three years as follows (Table 3-11):

- 1) Economic growth will average 6.2%. As for 1996, the nation's GNP will reach US\$285.0 billion and per capita income will rise to US\$13,307.
- 2) Increases in the consumer prices will average at least 4.0% annually.
- 3) The employment rate will increase 2.0% annually and unemployment will be 1.5%.

**Table 3-11 Revised Macroeconomic Targets**

Items	Unit	1992	1993 (estimated)	Targets	
				1996	1994-96 (average)
Economic Growth Rate	%	6.1	6.3		6.2
Employment Growth Rate	%	2.3	1.9		2.0
Unemployment Rate	%	1.5	1.5		1.5
CPI Growth Rate	%	4.5	3.6		<4.0
GNP	Current US\$	2,109.0	2,242.0	2,850.0	
GNP per Capita	Current US\$	10,215.0	10,757.0	13,307.0	
Export of Merchandise & Services	Current US\$	914.9	978.1	1,281.2	
Import of Merchandise & Services	Current US\$	866.5	946.8	1,242.6	
Net Export of Merchandise & Services	Current US\$	48.4	31.3	38.6	
Net Export of Merchandise & Services as a share of GNP	%	2.3	1.4	1.4	

Source : Council of Economic Planning and Development (August 1993).

**A. *Adjustments in Individual Projects***

As a result of the revision of the above overall economic development objectives, some projects that were initially planned but fell behind the original schedule or became less emergent in the renewed economic environment will be readjusted.

The Six-Year Development Plan originally contained 775 individual projects. After further review, 73 projects were dropped from the plan, 85 projects were consolidated together and 4 projects were divided. As a result, 19 projects were added due to consolidation or division for a cumulative total of 632 projects. Of these, 78 projects have not yet been approved and 558 approved. The total required expenditures for the Six-Year National Development Project was originally estimated at NT\$8,238.2 billion. After review, the required expenditures was adjusted downwards to 6,029.4 billion and expenditures of those yet approved for the period 1995-97 will be 613.1 billion. Thus, the total required expenditures in these six years will be 5,416.3 billion. After deducting the actual allocated budget for 1992-94 of 2,177.5 billion, expenditures for the period 1995-97 is estimated at 3,238.8 billion.

A total of NT\$2,177.5 billion has been entered into the budget for the projects of the Six-Year Development Plan from 1992 to 1994. However, only approximately 60% of these have been actually implemented in the last two budget years. There is great need for improvement in the effectiveness of budget implementation. In the next three years, government's revenues in the current and capital accounts can provide an estimated figure of 2,847.5 billion for the Six Year Development Plan. To avoid another occurrence of items entered into the budget yet unexecuted, from this year forward, attention must be paid to the execution effectiveness of each individual project.

**B. *Countermeasures***

In line with the revision of project items and budget, the government has also taken the following measures to assure the accomplishment of the development objectives:

*a. Strengthen the Government's Ability of Financing*

- 1) Seek out new avenues of financing while curtailing expenses, assert an appropriate degree of control over the government's budget and reduce the government's debt burden.



- i) *Open up financial resources*: Broaden tax base, establish a sound taxation system, strengthen tax collection, set up users fees, and strengthen management of government assets.
  - ii) *Curb spending*: Keep each government agency's number of personnel lean, effectively control government consumption and expenditures, encourage public investment so as to reduce the debt burden.
- 2) Strengthen government debt management, the following are sound methods of doing so:
- i) Establish upper limits of borrowing on credit.
  - ii) Review of redemption rate regulations.
  - iii) Develop a sound bond market, encourage the public to buy public debt.
  - iv) Extend the debt issuance period.
  - v) Set up a fund for debt redemption.
- 3) As for the legal upper limits set on Grade A and B Public Debt of 65% and 30% of expenditures set down in the "Regulations on Issuing Public Debt for Central Government Development Projects" and the legal upper limit of 40% of expenditures set down in "Regulations on Issuing Public Debt for Provincial (Municipal) Government Development Projects", they must be revised so that appropriate financial resources can be raised for public works projects.
- 4) Emulate the Japanese Finance Ministry's Investment Finance System and Singapore's Central Government Public Debt System. Under the previous mentioned systems, medium and long term funds such as postal savings and labor pension funds and various future annuities can be redirected into public works projects and raise the effective use of this capital.

*b. Effective Implementation of Public Works Projects*

1) Cautious planning of the budget

A total of NT\$2,280.8 billion has already been allotted for all projects already approved for the Six Year Development Plan from the start of the plan till June 1993. However, actual expenditures

up until February 1993 have only totalled 1,322.2 for an expenditure rate of just 60%. This significant discrepancy between allotment and expenditures is partially due to major difficulties and problems experienced in smoothly carrying out the projects and also due to inadequate planning and deliberation in executing the projects. A number of projects were from the onset unable to be started on schedule due to difficulty in acquiring land. The agencies sponsoring and managing the individual project should strengthen their planning work, cautiously assess the capability to execute the project. Then, they should anticipate potential problems which may occur and plan accordingly.

2) Strengthen review of budget implementation

The implementing and budget review agencies for each individual project should conduct an in-the-process review whether or not the project is falling behind its budget allocation and the needed improvements made. In addition, this should be referred to in future years' budget allocations. As for those projects whose actual expenditures were less than 80% of the budget allocated, disciplinary action should be taken according to the regulations in the central government's budget implementation guidelines.

3) Improve efficiency of government agencies

Government agencies involved in the Six Year Development Plan have shown administrative inefficiencies such as delays in urban planning modifications, redundancies in procedures for compensation of land acquired, difficulties in obtaining construction permits, delays in removing and moving pipelines and wasted time in coordination between different projects. As a result, projects have fallen behind schedule. Those agencies carrying out the project and other related agencies should review the related work procedures for each project and make simple revisions on a regular basis so as to raise administration efficiency. Revisions should be especially made in land regulations so that the administrative processes involved in obtaining land for public works projects can be simplified. So, legislative procedures in the Regulations on Land Acquisition should be completed as quickly as possible so to overcome those obstacles in acquiring land for public works projects.

4) Improve project bidding and purchasing work

Project bid tenders and purchasing have yet to be smoothly issued for reasons such as relative difficulty in the technological aspects of the project or difficulties in maintaining the construction environment. As a result, the contractor withdraws from the bid, bid tenders are aborted because the base price is too high or manipulated because foreign contractors have monopolized the bidding. These are the major reasons why projects have fallen behind schedule. To allow project bidding and purchasing work to be smoothly completed the revisions in the "Auditing Regulations for Government Construction Projects and Its Purchasing, Custom Orders and Sale of Assets" and a new modern legal system for public works project bidding and asset purchase system should be adopted as soon as possible. Its main points include the following:

- i) Review the reasons why there is a lack of enthusiasm in participating in the bid and what incentive measures should be adopted to correct the situation.
- ii) A realistic assessment of market prices should be made and a fair base price should be established.
- iii) The public should be mobilized to strengthen technological development and transfers so that foreign companies do not monopolize the bidding.

5) Strengthen the foresight and comprehensiveness of the public works planning

Public investments are long term, continuous and usually large scale projects. Therefore, each government agency should have its own individual departments to carry out foresighted and comprehensive planning of major public works projects and execute them in the appropriate order.

*c. Actively Encourage the Public to Participate in the Six-Year Development Plan*

1) Establish a schedule for privatization of state-run industries, carry out the privatization of state-run firms.

- i) Taiwan Machinery, BES Engineering should be privatized within six months time, Chung-tai Chemical and China Steel in a year and two years respectively.

- ii) Schedules for all other state-run firms could be made before September 1993.
- 2) Promote the "Economic Revitalization Proposal", provide encouragements for the public to participate in public works projects
- i) Speed up the completion of enactment procedures for the "Guidelines for Public Incentive to Participate in Transportation Public Works Projects", draft up actual public works project items and encourage the public to participate in the high speed railroad, national highways, mass rapid transit systems, airline terminals, industrial ports and other transportation related development projects.
  - ii) Revise relevant regulations on encouraging the public participation in public works projects and actively encourage the public to invest and participate in the construction of parking structures, markets, shopping centers, tourist and recreational facilities, cultural and educational facilities, medical and sanitation projects, environmental protection, public housing, development of new townships and communities and other development projects.

## **CONCLUSIONS**

Taiwan's economic success traces to the policy reforms of the early 1960s, entailing a combination of trade and financial liberalization. These reforms were in turn buttressed by a well-functioning labor market and prudent macroeconomic management. While the nation has maintained a healthy economic growth, it cannot be denied that there exists developmental bottlenecks in its transition from a NIE toward a developed economy. The most serious of these are economic imbalance and a loss of social order, a failure of infrastructural construction to keep pace with rapid economic development, and a general deterioration of the living environment. The answer of the Taiwan government is the Six-year National Development Plan.

The six-year plan is a forward-looking, integrated, and balanced plan of development that was formulated from an overall national viewpoint and in consideration of national policy goals, the overall benefit of the nation and its people, and the supply of resources. In the plan, there are "ten newly emerging industries": telecommunications, information, consumer electronics,

semiconductors, precision machinery and automation, aerospace, advanced materials, specialty chemicals and pharmaceutical, medical and health care, and pollution control. There are "eight key technologies": opto-electronics, software, industrial automation, applied materials, sensors, biotechnology, resource development and energy conservation. The Plan which starts in 1991 is now undergoing a mid-term review in consideration of changing circumstances, especially the government's position to meet the plan's financial needs over the next three years. It is hoped that after the Plan Taiwan will be well positioned for a brave new world.

How feasible is the target set by the plan? As a response we are drawing upon Porter's (1990) work. Hidden in Porter's treatise on how nations develop (and lose) competitive advantage in international markets is the idea that the trajectory of an economy may be conceptualized as proceeding along a continuum that may be summarized as factor-driven, investment-driven, and innovation-driven phases of development. The central challenge facing the Taiwan economy is the transition to innovation-driven development. This is a particular translation of the idea that Taiwan is poised to join the ranks of the developed countries by the end of this century.

Taiwan has been remarkably successful in achieving factor driven development, i.e., in deriving national competitive advantages from basic factors of production (disciplined, hard-working, educated workforce, rapid capital accumulation), diligently applying them to foreign-designed products, and competing effectively in international markets largely through sourcing arrangements with Japanese and Western firms. It has also fully achieved investment-driven development as can be seen from its mass volumes of foreign direct investment. It now faces inevitable constraints because the phase of factor-driven and investment-driven developments is only possible in a certain class of industries: those with significant scale economies and capital requirements, standardized products, low service content, technology that is readily transferable. Innovation-driven development, however, requires in-house technological capability, so that firms can not only appropriate and improve technology and products from other countries but create them. The six-year plan contains a lot of fixed investments that are required to remedy the eminent problems of economic imbalance and social disorder. However, it still remains to see how the plan can nurture an economic environment germane to the innovation-driven development.

## REFERENCES

- ASIAN DEVELOPMENT BANK (various issues), *Key Indicators of Developing Asian and Pacific Countries*, Manila: Asian Development Bank.
- CHOWDHURY, A. and I. ISLAM (1993), *The Newly Industrializing Economies of East Asia*, New York: Routledge.
- COUNCIL FOR ECONOMIC PLANNING AND DEVELOPMENT (1991), "The Six-Year National Development Plan of the Republic of China," January 1991.
- COUNCIL FOR ECONOMIC PLANNING AND DEVELOPMENT (1993), "The Mid-term Review of the Six-Year National Development Plan", August, 1993.
- ECONOMIST (1992), "Taiwan on the Move", *Economist*, October 10, p.1-18.
- FRY, M. (1990), "Domestic Resource Mobilization in Developing Asia: Four Policy Issues", *Asian Development Review*, Vol.19, No.1, p.14-39.
- KAO, Chun (1993), "The Impact of Taiwan's Indirect Trade and Investment with Mainland China on Taiwan's Industrial Development", Chung-hwa Institute for Economic Research.
- LIN, C. (1973), *Industrialization in Taiwan 1946-72*, New York: Praeger.
- MIKESELL, R. and J. ZINSER (1973), "The Nature of Savings Function in Developing Countries: A Survey of Theoretical and Empirical Literature", *Journal of Economic Literature*, Vol.11, No.1, p.1-26 .
- OECD (1988), *The Newly Industrializing Countries - Challenge and Opportunity for OECD Industries*, Paris: OECD.
- PORTER, M. (1990), *The Competitive Advantage of Nations*, London and New York: Macmillan.
- TSIANG, S.C. and R.I. WU (1985), "Foreign Trade and Investment as Boosters for Take-off: The Experiences of the Four Asian Newly Industrializing Countries", in GALENSON, W. (ed.), *Foreign Trade and Investment: Economic Development in the Newly Industrializing Asian Countries*, Madison: University of Wisconsin Press.
- UNIDO (1979), *World Industry Since 1960: Progress and Prospects*, New York.
- UNIDO (1982), *Asian Industry in Figures*, New York.
- UNIDO (1983), *Industry in a Changing World*, New York.
- UNIDO (1985a), *Industry and Development Global Report 1985*, New York.
- UNIDO (1985b), *Industry in the 1980s: Structural Change and Interdependence*, New York.
- WORLD BANK (1987-93), *World Development Report 1987-93*, New York: Oxford University Press.

## **HONG KONG'S ECONOMIC PROSPECT IN A CHANGING RELATIONSHIP WITH CHINA - A Speculative Essay**

*Shu-ki TSANG*

### **THE HAZARD OF PREDICTING THE FUTURE**

To predict the future in a volatile world is a hazardous endeavour. To make accurate forecasts about a "small open economy" and, indeed, a "small open polity" like Hong Kong requires no less than a crystal ball. Fifty years ago, who could have imagined a "fragrant harbour" of today's grandeur and glamour? Speculation about what would happen in Hong Kong in the 21st century may even be politically unwise. Both the Sino-British Joint Declaration and the Basic Law have made it clear that the capitalist system and life style in the territory shall remain unchanged for 50 years after 1997. So what is there to talk about? The "capitalist system", "life style" are vague terms. If I foresee major changes in Hong Kong's socioeconomic developments in the years to come and discuss them in detail, I run the risk of giving the impression that I actually advocate them, thus unwittingly challenging a sacred principle in the Joint Declaration and the Basic Law.

Let me start by pointing out one obvious irony arising from the territory's transition through 1997: the contradiction between politics and economics. Politically, the principle, as enshrined in the Sino-British Joint Declaration and the Basic Law, is straight forward: "one country, two systems", at least up to 2047. Economically, the reality is one of phenomenal integration. China and Hong Kong are now the largest "outside" investor in each other's economy. Hong Kong handles the traffic of a third of China's external trade, while the number of labourers in the Pearl River Delta processing Hong Kong's intermediate products is larger than the total work force of the territory itself. Even in the early 1980s, these developments were quite beyond imagination.

## **THE POLITICAL ECONOMY OF THE TRANSITION**

Economic integration would generate demand for some form of political congruence, which, theoretically, is possible under the framework of "one country, two systems" that defines the relations between a central sovereign power and a local government. In reality, there is a number of difficulties in achieving harmonization, given the history of colonialism in Hong Kong for more than a century, the territory's evolving social profile, as well as recent developments in China and Hong Kong's varied reactions to them.

We all remember that formal Sino-British negotiation on the future of Hong Kong began in 1982. There has been no plain sailing since then, the achievement of a Joint Declaration notwithstanding. In the midst of hard bargaining in 1983, there was the Hong Kong Dollar crisis, resulting in the present linked exchange rate system, which is increasingly becoming a problem because its desired adjustment involves rising political and economic costs. Then came the controversial drafting of the Basic Law, the 1989 turbulence and its aftermath, the collapse of communism in Eastern Europe and the former Soviet Union, and the renewed row between China and Britain since October 1992.

Let me be as frank as possible on the issue: despite the Joint Declaration, the Basic Law, and all the politicking of the past decade, the concept of Hong Kong as a local government functioning under the sovereignty of China, albeit a reforming one, has still not sunk in for a substantial portion of the local population. People migrate, castigate Beijing, fight for democracy (read "support Chris Patten"), or do nothing but earn money, as much and as quickly as possible - all signs of unsettled anxiety about "one country, two systems". Many local residents still do not know what it means to live in a "special administrative region" (SAR) under Chinese sovereignty after 1997.

This kind of socio-political hesitance, or some may call "myopia", while understandable, is in stark contrast to developments on the economic front. The Hong Kong economy is now so integrated with the Chinese counterpart that the boom and bust in the latter will have a tremendous impact on the territory. It is estimated by the economists of Hang Seng Bank<sup>1</sup> that around a quarter of Hong Kong's aggregate output in 1990 could be attributed to the China factor. This compares with only 5.3% in 1980, the first full year after China launched its economic reform. Recent developments, particularly in the light of the "Deng whirlwind" of early 1992 and early 1993 and the euphoria over the prospect of China becoming the largest economy in the world by the early 21st Century, would mean that the *Hang Seng* estimate has to be revised upward rapidly and significantly now and in the near future.



The incongruence between transition economics and politics has already taken an explicit expression: the local business community has almost been unanimous in its stance against the initiatives of Governor Chris Patten on electoral reforms for 1994-95, which caused the present Sino-British row. So much so that Mr. Patten felt compelled to chastise its "short-sightedness" in a TV interview after his second Policy Speech to the Legislative Council in October 1993.

In comparison, the responses of the rest of the society have been mixed. Poll after poll showed that while Hong Kong people in general think that it is a good idea to have more democracy, they also regard as important to have a stable relationship with the Mainland. Some sociologists have called such a phenomenon "ambivalence", but this symptom of indecisiveness could reflect the trend of polarization in the territory---people might be forced by circumstances to side with either the camp of die-hard anti-communists and idealistic democrats or that of nationalists and unprincipled pragmatists, in the face of a historical watershed. A survey that fails to handle carefully a "split sample" may confuse dichotomization with ambivalence.

On the other hand, one could argue that the Chinese government also has a good deal to learn in dealing with an advanced capitalist SAR under its sovereignty. Its reactions so far, ranging from naive appeasement to arrogant hostility, are in the eyes of many a symptom that it has yet to establish a proper stance towards the people of Hong Kong. Alternatively, they may represent the different attitudes of the "reformists" and the "conservatives" in the Mainland.

I do not know the true answer to this question of duality. All I can say is that I believe that the contradictions, whatever their nature, are going to persist in the years to come. "One country, two systems" is a historically unprecedented experiment. It would be foolhardy to presume that the rules of the game could be established and settled easily. Time, indeed quite a lot of it, is needed for all parties to adjust their behaviour to the new environment.

One complication is Hong Kong's changing position in international geopolitics, towards and beyond 1997. The 1997 transition itself is now under clouds. The June 4 tragedy in 1989 and the dramatic collapse of communism in Eastern Europe and the Soviet Union in the subsequent two years have substantially altered the diplomatic setting on which the Sino-British agreement on the future of Hong Kong rested. The West's policies towards China have been undergoing review and changes, as China became the last "communist" bastion and was no longer functional in countervailing the "evil empire" of the former Soviet Union. The current controversy over political reform in Hong Kong, touched off by Governor Chris Patten's constitutional

package of October 1992, is I think part of the readjustment process in the relations between China and the Western powers.

The irony is that China has been able to emerge from the 1989 turmoil and the economic retrenchment in 1989-91, against all the doomsday predictions, and launch a spectacular economic take-off. Adopting purchasing power parity (PPP) methods of re-estimating GDP figures, the World Bank and the International Monetary Fund have recently ranked China as the second and the third largest economies in the world respectively. It is also widely speculated in the popular press that China will overtake the United States as the largest economy in the world by early 21st Century.<sup>2</sup>

As Alan Donald, the British Ambassador to China in 1988-91, put it, the quarrel between China and Britain over Hong Kong is not essentially about democracy and human rights. The nub is the lack of trust between the two parties in the post-cold-war era. The substance of Patten's package, the functional constituency and election committee proposals, is in my view neither revolutionary nor soundly based on legal and diplomatic grounds. The style of its presentation has certainly been provocative. China's responses, guided by either a sense of insecurity in the post-communist era or a growing confidence because of increasing economic might, have also been exceptionally stern. Hence the deadlock.

After much ado, the Chinese and the British governments engaged in 17 rounds of talks on the electoral arrangements of 1994-95 between April-November 1993. Not many people were optimistic about a breakthrough before the talks started, and hence the break-off in late 1993 did not cause much surprise. Most just regarded it as a political show. Now the chance of the resumption of the talks seems remote, with the unilateral tabling of bills by Patten. Non-convergence increasingly looks likely---and the Chinese government will set up a "second stove" which prepares for its own version of the SAR government after 1997.

These days there are many optimists who would argue that the negative impact of Sino-British political confrontation and the possible instability of non-convergence has been largely "discounted", as investors start to get used to politicking between the two sides. The fact that the Hang Seng Index broke all records in 1993 seems to lend weight to their optimism.

The optimists reckon that the key factor affecting the Hong Kong economy is not politics but the fortune of the Chinese economy itself. Moreover, Hong Kong's economic importance to China is such that whatever the political conflict between China and Britain over Hong Kong turns out to be, China will try its best to separate politics from economics in the transition. Hong Kong may suffer a political backlash after 1997 if the Sino-British deadlock results

in confrontation, but the economic goose that lays golden eggs would certainly be taken care of.

All these optimistic discussions of course hinge on the assumption that the stock market is a reliable indicator to the future and that the Chinese economy would progress as many predict. China, despite all its high-growth potentials, is facing a series of very difficult problems ranging from the lack of effective macroeconomic control, cyclical overheating, widening income inequality and regional disparity, to "economic warlordism" (*zhuhou jingji*), peasant rebellions, rampant corruption, and voids in collective goals. There is no guarantee that Chinese economic take-off will be plain sailing. A collapse is at least theoretically possible.<sup>5</sup> In that circumstance, which I hope would not materialize, prosperity and stability in Hong Kong would be seriously undermined.<sup>6</sup>

Even if the economic factors remain favourable in the Mainland, the politics of the transition is not that simple. Should there be no convergence, China would have to set up its own version of the SAR government on July 1, 1997. Since selection or elections of the post-1997 chief executive and legislature could not proceed in Hong Kong before that date, given Sino-British confrontation, there might be a temporary political void. Who is going to take care of it?

Moreover, China could feel uncomfortable in dealing with an SAR with a substantial portion of intransigent population, embolden by the last colonial governor who would get away without paying any cost (indeed, earning a good deal of political capital in "standing up to China"). The central government might be keen to teach somebody a lesson. The fact that Hong Kong could serve as a geopolitical leverage for other outside powers after 1997 would only add to the complication. The tension between China and the West that I discussed above will I think last for a long time, and may actually aggravate.

One possible scenario, and I stress that this is just a possible scenario, is that China decides to implement a policy of economic absorption and assimilation of Hong Kong, reducing the latter to a region of economic dependency, in the hope that the SAR's political bargaining power is as a result commensurately kept within agreeable limits. Any foreign ploy to use Hong Kong as a pawn to destabilize China would also be frustrated. In a way, it would even be advisable to transfer some "portions of prosperity" in Hong Kong inwards, to Shenzhen, the Pearl River Delta, Guangdong, or further north. Hong Kong should continue to be the magical goose that lays golder eggs, but don't let it get too fat, lest it will be stolen. (Or don't let its egg expand too much, otherwise it'll walk or fly away).

At the risk of exposing my ignorance about geography and urban planning, I would give a "practical" example of such a "containment" policy: any "central-place" infrastructure of regional importance should in this scenario be located in Shenzhen or Guangzhou rather than in Hong Kong. Another far-fetched possibility is that the Chinese central government would turn Shenzhen from a special economic zone into a municipality, in the same ranking as Beijing, Tianjin and Shanghai, so as to increase central control over its business, and by very simple reasoning also exert greater influence over Hong Kong.

I have no wish at all for these to happen, because I do not think that they are the best ways to handle central-local relations in the post-1997 era. Nor are they optimal methods of enhancing economic development in Southern China. Some would certainly doubt the ability of the Chinese government to implement such a coordinated policy in an era of economic warlordism. Others would categorically deny that it has such intention whatsoever.

For the future of Hong Kong and that of China, it is my deeply held belief that a virtuous circle, instead of a vicious one, should be promoted for Sino-Hongkong relations.<sup>6</sup> Southern China and Hong Kong should cooperate and compete constructively, rather than practice containment or assimilation, which may run against the law of comparative advantage. To set into motion such beneficial dynamics, we need to keep good faith, nurture good will, and build a framework for expanding our complementarities. I hope that my speculation turns out to be totally unfounded. Future historians may find the 1997 issue a minor bump in Hong Kong's uninterrupted prosperity and China's march to modernity, while no 21st-century students can earn a Ph.D. by writing a thesis on it.

## **THE ECONOMIC INTEGRATION IN SOUTHERN CHINA: BENEFITS AND PROBLEMS**

Let me now go to issues which are more "economic" in nature. As a result of the rapid integration between Hong Kong and Southern China in the past decade, a "structural transformation" has allegedly unfolded in the territory's economy. While the mutual benefits have been tremendous, serious problems have emerged and important challenges lie ahead.

Let us first look at the issue from Hong Kong's perspective. Superficial evidence of the "structural transformation" abounds. Manufacturing plants have been relocated to the Pearl River Delta on a massive scale. Over 3 million employees in Guangdong are reportedly working directly or indirectly for Hong Kong. Despite China's open policy since 1979, the development of

her service industries has lagged behind. From transportation to re-exporting to various types of financial and business services, Hong Kong, with its comparative advantage in these fields, has been heavily involved in serving the country's external economic exchanges. At the same time, development in Hong Kong has reached a level that domestic demand for various kinds of services is substantially increased.

The changes in manpower and output patterns in Hong Kong under such a process have been remarkable. The manufacturing sector and the service sector employed 39.1% and 35.8% of the local labour force respectively in 1980. The latter subsequently overtook the former. In 1991, the share of manufacturing employment was 28.2% while that of services was 62.8%. In terms of output, the manufacturing and the service sectors accounted for 23.8% and 63.2% of Hong Kong's GDP respectively in 1980. The ratios changed to 15.5% and 73.5% respectively in 1991.

Nevertheless, I think that it is misleading to call such a phenomenon the "structural transformation" of the Hong Kong economy. I have said this elsewhere<sup>7</sup> and I wish to repeat it here. In the textbooks of mainstream development economics, the shift from an agriculture-based to a manufacture-based economy is hailed as "progress"; so is the trend under which services assume increasing importance over manufacturing in manpower and output shares. The reasoning is that the transformation has been prompted by productivity enhancement in the previously dominant sector (e.g. agriculture), which enables the release of manpower and resources to the "modern" sector (e.g. manufacturing). The development of the latter in turn generates a beneficial feedback to the former (e.g. by facilitating the mechanization of agriculture). A virtuous circle is thus formed, propelling the economy forwards. In the end, a small percentage of the work force can provide enough food for the whole populace. Similar feedback loops are presumably established between manufacturing and service industries in "post-industrial" economies. Japan is frequently cited as an example of information and manufacturing strengths go hand in hand.

It is doubtful whether the present changes in Hong Kong's employment and output patterns reflect such qualitative improvements.<sup>7</sup> In relocating their manufacturing plants to the Mainland, most Hong Kong entrepreneurs have not been motivated to employ sophisticated technology. Indeed, significant cost savings due to low wage rates and other charges in Southern China have been a powerful disincentive for technological upgrading and, despite short-term gains, may not stand the economy in good stead in the long run. On the other hand, the services that China requires from Hong Kong appear to be of the conventional type. There is a lack of evidence that a virtuous circle

between manufacturing and services is being established in the "structural transformation" of Hong Kong's economy.

The so called "structural transformation" looks more like a case of significant resource re-allocation in the context of regional economics, under which two previously detached areas rapidly remove obstacles to the flow of factors of production and funds. A new pattern of division of labour and cooperation is established, from which significant short-term profits are reaped by both sides. The danger is that these gains are so huge that both are not pressurized to make real structural changes that are necessary for improving the long-run efficiency of the economy. Some economists have used terms such as "hollowing out" and "Dutch Disease" to describe the paradoxical phenomenon of a long-term risk hidden under a short-term bonanza.

In Hong Kong, despite the remarkable economic gains in the past decade, the resulting major problems are:

- 1) There is a lack of progress in industrial and technological upgrading and a process of "de-industrialization" has unfolded. These may have serious implications for economic growth, employment, productive efficiency, and balance of payments in Hong Kong in the longer run. A key concern is the possible constraint on the prosperity of a service economy that supports a labour-intensive, export-oriented system in southern China which lacks technological progress and must therefore face the ultimate limit of market demand for its output some time in the future. Unlike the pre-1979 situation, when Hong Kong had to seriously ponder about industrial diversification and upgrading, the territory's economy is now so integrated with the Chinese counterpart that it will rise and fall with the latter, as the chance of "de-coupling" diminishes rapidly. Taiwan has been very sensitive about the issues of integration, dependency and synchronicity, while Hong Kong has let all its defense mechanisms fall in an almost sheepish manner.
- 2) Inflation is aggravated. Consumer inflation has been hovering around the double-digit level in Hong Kong since 1989, although there have been some improvements lately. The so called "structural transformation" has come into conflict with Hong Kong's labour supply potential. The fact that the share of services employment in Hong Kong increased by 27.0% between 1980 and 1991 but its output proportion went up only by 10.3% indicates that as the Hong Kong economy became more services-oriented, its overall labour intensity apparently also rose significantly. This partly reflects the slow progress that Hong Kong has achieved in automating its services and replacing manpower with machine power. Such a trend

contrasts with the change in the local demographic pattern which has led to much slower labour supply growth, which has dropped to an annual average of about 1% in recent years. That inflation would result should hardly be surprising. Moreover, the highest rates of inflation have been observed in the service sectors of the economy.

There is of course another conduit through which inflation can be generated. Most commentators agree that Hong Kong's GNP, which has yet to be compiled by the government, should be higher than its GDP, which showed much flatter growth in the past years (with an average annual real growth of less than 4% in 1989-1992). The problem is that the gap between GNP and GDP has probably accrued mostly to the investors who make use of cheap resources in Guangdong, rather than the Hong Kong workers. Moreover, any money that is earned in China, repatriated, and spent on assets in Hong Kong would bid up asset prices and, eventually, consumer prices by pushing up the costs of providing consumer goods and services, in so far as these activities use the assets. The same would apply in the case of Mainland funds investing in Hong Kong.

- 3) Income inequality is worsening. The irony is that labour shortage has not unduly benefitted local work force in general and there is ample evidence that the income gap in Hong Kong has been widening. On the basis of the changes in the decile or quintile distribution of household incomes as well as the Gini coefficient, a worrying long-term trend of income disparity has emerged. The situation seems to have deteriorated significantly between 1986 and 1991 and Hong Kong's income inequality is the worst among economies of comparable development levels.<sup>8</sup> One factor is that the structures of remunerations in the service sectors are usually more disperse than those in the manufacturing industries. The rising importance of the former has therefore contributed to the widening of the overall income gap. The fact that income distribution has deteriorated under labour shortage could also reflect the prevalence of market power, with which monopolistic groups could pass the rising costs, plus an abnormal profit margin, to end-users by charging much higher prices. Another conjecture is that while the economic integration between Southern China and Hong Kong enriches both sides, the distribution of the benefits among various sectors of the population has been rather concentrated and uneven. Many of those who are not involved in "China trade" may actually get worse off, as the "structural transformation" of the economy and high inflation work against them.

Let me now move over to the southern Chinese side of the integration story, because I think that it could shed important light on Hong Kong's own development. The mirror image is always instructive in understanding oneself. For ease of exposition, I shall concentrate on developments in Guangdong.

Like Hong Kong, Guangdong's very rapid economic growth has had its own structural problems. The major beneficiary of the past decade of performing processing work for Hong Kong and attracting outside investments has been the Pearl River Delta, which accommodates only one-third of the population in the province. Regional disparity in development appears to have widened. The share of agricultural and industrial production of the Delta in the province rose from 32.7% in 1978 to 57.6% in 1990, while that of the mountain region, which occupies 60% of the land and where 40% of the population live, fell from 16% to 13.4% in the same period. In terms of per capita GDP, the Delta was ¥1106.4 above the mountain region in 1985. The gap widened to ¥2281.5 in 1990. Likewise, the difference in per capita residents' savings deposits between the two regions also enlarged from ¥548 to ¥2254 from 1985 to 1990.<sup>9</sup>

While Hong Kong relocates its manufacturing plants to Guangdong, thus constraining the real earnings of local blue-collar workers, Guangdong goes through a process, which has essentially the same result, by importing a large number of labour from other provinces. It is estimated that in Dongguan and Baoan alone, about 1.4 million employees from other provinces are working.<sup>10</sup> So Hong Kong is not just utilizing the labour in Guangdong, but also, through Guangdong as an agent, labour in the neighbouring provinces, and indeed all over the country. Just as in Hong Kong, such a possibility of employing cheap labour may bring tremendous benefits, but also serious long-term problems. Income distribution within the province would worsen. The incentives of moving up the technological ladder may also be undermined, as short-term profits keep rolling in.

Theoretically, with the influx of labour from other parts of China, resources and manpower are released in Guangdong and the province could "structurally transform" its economy by climbing the technological ladder and developing tertiary services which help improve the efficiency of the secondary industries. If Guangdong continues to concentrate on doing processing work for Hong Kong and producing labour-intensive products, there is a danger that such a strategy would be overtaken by events. With other parts of China rapidly opening up for outside investments, a good deal of processing investments may go to the north and the interior. Moreover, Guangdong's hold in the country's domestic consumer goods market may be undermined, as costs of production escalate and other provinces catch up.



Externally, the global market for lower-end products is also characterized by intense competition and rising protectionism. Guangdong simply cannot stay at the same product level indefinitely. It has to move up to higher echelons of the market.<sup>11</sup>

From official pronouncements, Guangdong in the 1990s is apparently keen to invest heavily in infrastructure and to give priority to the growth of heavy, chemical, equipment and other high-tech industries. The success of such a development strategy depends on many factors. As far as infrastructure investments are concerned, Hong Kong is certainly able to contribute as the territory is now in a position to export capital massively, and many of its constructors and property developers are well experienced in large projects. Hong Kong's geographical limitation also forms a severe constraint to their long-term growth, and they are only too happy to expand into Southern China. However, for heavy and high-tech industries, Hong Kong would need to re-orientate its own economic development pattern significantly if it is to participate meaningfully in the process.

In any case, whether Guangdong will succeed in its effort to develop heavy and high-tech industries is not easy to tell. The province is poorly endowed with natural resources, and its technological foundation is relatively weak. There is also a lack of large enterprises which can take advantage of the economies of scale.<sup>12</sup> So such an effort would require coordination of policies on many fronts, including investment, enterprise reform, manpower training, taxation, and industrial policies.

An alternative strategy is to turn Guangdong into a large trading and servicing region, providing transportation, communications, marketing, financial and business services to the rest of China. The emphases will then be on building ports and airports, road networks, and communications facilities, as well as developing different types of commodity and financial markets and various tertiary industries such as accountancy, insurance, legal practice, etc. Under such a scenario, Guangdong will be serving China in a manner similar to the way that Hong Kong has been serving Guangdong. The attractiveness of this line of development is that money can be earned rather quickly, and with less risk. It is also more in line with Guangdong's comparative advantage, at least in the static sense.

The implications of this scenario for Hong Kong are mixed. On the one hand, Hong Kong would be able to participate to a great extent in such a development, particularly in the early stages. It simply means more business for Hong Kong's already booming tertiary sectors. In the longer term, however, it implies a process of *structural convergence* between Hong Kong and Guangdong. The big question would then be: does China need a servicing

region as large as that of Guangdong-cum-Hongkong? To put it rhetorically: Is it advisable for Hong Kong, Shenzhen, Guangzhou, and Zhuhai each to host an "international" financial futures market? For Guangdong itself, the strategy would mean following the "natural" course of regional re-division of labour according to "given" comparative advantage. It will however bring long-run problems similar to what Hong Kong has been confronted with: de-industrialization, "hollowing out", inflation, and worsening income distribution, plus its own version of regional disparity. Moreover, Guangdong is no island economy like Hong Kong. Can the province really feed its huge population (now approaching 70 million) by concentrating on services?

### **A GLORIOUS FUTURE: FOR SOME ONLY?**

A glorious 21st century may be awaiting us. Imagine a Greater China with unprecedented economic prosperity. Driving from Hong Kong to Guangzhou takes two and half hours and to Shanghai thirteen or fourteen on super-highways, and is as pleasurable as speeding from Osaka to Tokyo, or from New York to Chicago (without the traffic congestion, that is).

But will it be a glorious future for a few, or for most of the population?

Under the most "optimistic" scenario, economic integration is total and Hong Kong would serve as the "Manhattan" of a prosperous China in the 21st century. As a side effect, the demand for assets in Hong Kong would undergo a dramatic change: it will be *internationalized* to an unprecedented extent. In so far as Hong Kong is a stepping stone to the booming China, or a synchronized economic sub-entity, albeit with better facilities and being more market-friendly, foreign investors would be tempted to establish a base in the territory.

Likewise, an outgoing China would put increasing value on Hong Kong as an outpost to the world, not to mention the informal capital flight to the territory that has been gathering momentum. These would translate into strong demands for financial assets as well as commercial and residential property for business operations and for managerial accommodation. China is already the number one "outside investor" in Hong Kong, with total investment estimated to be in the range of US\$12-20 billion.<sup>13</sup>

Hence the observation that property prices are beyond "local purchasing power", which is undoubtedly accurate at least for small-sized and medium-sized flats, would become increasingly irrelevant. The stock market, even without Morgan Stanley's participatory encouragement, shown recently with much fanfare, could reach new heights that few could now confidently predict.

Under such a scenario, the Hong Kong urban centre in the 21st century

would be quite "uninhabitable" for the non-rich, who may be driven out to the cheaper outskirts, or even to Shenzhen and other areas in the Pearl River Delta. A 24-hour customs at the border between Hong Kong and China and commensurate rapid-transit transport would render it possible for the white collars, and the blue collars (if there are any left), to work in Hong Kong but live in the southern part of Guangdong. Whether they like it or not is another story. So are the political implications for "one country, two systems".

Similarly, overheads and operating costs for businesses in Hong Kong would be so expensive that only high-risk, high-returns economic activities would find it profitable to be based here. All manufacturing industries will have to go. Even low-returns services need to move out. Again, whether many in the work force can adjust to this "structural transformation" is another story. So are the social implications in terms of income and wealth disparity.

In sharp contrast, the worst-case scenario for Hong Kong's future development would read like a horror story: China plunges into chaos after Deng passes away. Economic warlordism is compounded by political or even military strife, watched helplessly by a weak and divided Beijing. Refugees flood Hong Kong and the rest of the world. The bubble bursts and a prolonged period of disturbance sets in.

Even in less drastic terms, it is useful to look back into history. The last property euphoria in Hong Kong--the 1979-81 boom--saw most property prices triple in three years, only to be halved later in less than two, largely because Deng Xiaoping launched the economic reform and began to open up the country. Now that China aspires something much grander--to be the largest economy on earth, against a rather depressed global economic scene--the peak could defy imagination, so would the adjustment.

### **HONG KONG OVER-PRICED, SIDE-TRACKED AND FURTHER MANHATTANIZED?**

Barring the worst-case scenario, we can ask ourselves another question: Is Hong Kong really so important to China? Will it continue to be? Most people can cite off-hand three major functions of Hong Kong in China's economic take-off, namely, serving as the country's (1) marketing outlet; (2) external port; and (3) financier. It appears that, in the long run at least, Hong Kong may see a decline in its relative importance in these three aspects. Let me again play the role of the devil's advocate here.

The concept of Hong Kong serving as China's marketing outlet is a familiar one, deeply entrenched in the experience of the past decade when local manufacturers rushed to relocate their plants to Southern China to take

advantage of its cheap labour resources. The operation in Hong Kong has largely been turned into a managerial and sales centre. This pattern of division of labour is vividly captured in the term *qian dian hou chang*---"the shop at the front, the factory at the back". Obviously, Hong Kong is the *dian* (shop), and Southern China is the *chang* (factory). Such a link has worked out very well because of two factors: (1) the factory has been making light-industrial goods that the shop previously made itself; and (2) the shop has a large equity stake in the factory through various forms of investment. These could change in the future if Southern China embarks on its own version of development with much greater emphasis on heavy and hi-tech industries in which Hong Kong has as yet to establish any comparative advantage. Guangdong would form partners with outside foreign investors who may already have their own global distribution networks, hence bypassing Hong Kong, and the territory would lack experience in selling the products of iron and steel, petrochemical, machinery and other high-tech industries that the province may decide to develop.<sup>14</sup>

As far as the port function is concerned, Hong Kong is at the moment handling a very large share of China's external trade. Both the Kai Tak Airport and the container port at Kwai Chung are among the busiest in the world, and the "China factor" is definitely the major driving force. However, China is catching up fast as it enters into an "infrastructure-led, heavy-industries-driven" stage of economic development, which is quite different from the mode of growth in the 1980s. The latter was characterized by rapid expansion of light industries that process and manufacture consumer goods.<sup>15</sup> A large number of highly ambitious plans for the construction of airports, ports, railway and highways has continually been announced by central and local authorities. Those for the Yangtze Delta (centred around Ningbo and Shanghai) and areas around Bohai (from Tianjin to Dalin) are particularly noteworthy as they may form direct competition with Guangdong and Hong Kong.

Even within Greater China, competition is likely to heat up in the future. Shenzhen already has its own airport (Huangtian) and is building a huge port at Yantian. Zhuhai and Macau are constructing their own airports, while Guangdong is going to have a much larger replacement to the present Baiyuan. Even Foshan has had its airfield, which operates commercial flights. Some experts have indeed warned that there are perhaps too many airports in the Pearl River Delta and much better traffic coordination is necessary. Moreover, because of the Sino-British political row, the development of the new airport and new container terminals (CT9 and beyond) in Hong Kong is being affected and delay is quite possible. Whether the delay also fits into the "conspiracy

theory" that I put forward in Section 2 above, under which Beijing would see it fit to transfer some of Hong Kong's functions to other parts of China, is left to the readers to judge. One complication is that a number of the prominent investors in Hong Kong is involved in these huge infrastructural projects in China, and accusations that they may be betraying local interest have been voiced in some quarters.

Hong Kong is undoubtedly playing a very important function in providing external financing for China's growth and reforms, not just in being its largest "outside" investor, but also in extending bank loans, listing the H shares of some of its largest enterprises, and housing many of the foreign financial institutions which are keen to go into China but need a modern and convenient base. The biggest competitor to Hong Kong is however Shanghai, which is at the forefront of China's unfolding financial revolution. The city has attracted worldwide attention through its huge developmental plan for Pudong and the openly stated goal of turning the Bund into the "Wall Street of China". The fact that Citibank recently moved its China Headquarters from Hong Kong to Shanghai is a clear warning to the territory not to be complacent about its "comparative advantage".

Some commentators have been much more optimistic about Hong Kong's economic future. They point to the fact that Hong Kong's importance as a trade intermediary actually *increased* in the past fourteen years even as China opened herself to the rest of the world. Various reasons that evoke the theory of intermediation are cited. The gist of the arguments is that Hong Kong can continue to offer services that would reduce the transaction costs for foreigners in doing business with China, because of the territory's geographical proximity and cultural affinity to China and its "first-mover" advantages such as accumulated experience and economies of scale. Moreover, on the Chinese side, the rise in the heterogeneity of products traded (as a result of development) as well as the decentralized mode of open policy under which local authorities and enterprises have more and more autonomy in conducting foreign trade would increase the transaction costs for foreigners, which Hong Kong with its presumed experience and contact could help to alleviate.<sup>16</sup>

While such a view no doubt gives a partial explanation of Hong Kong's increased importance in the past decade, it is dangerous to extrapolate it into the future without careful analysis. As an explanation it has neglected the simple technical reason that China's transport and communication facilities could not catch up with its trading volume, and therefore she was forced to route some trade through Hong Kong. With China entering a period of rapid infrastructural expansion and all the ambitious plans of building airports and ports, "diversion" (or more accurately "reversion", some would say) of at least

some trade is inevitable. Moreover, as inflation (particularly asset inflation) continues to surge, Hong Kong is in the danger of pricing itself out of the market. Prices and rental rates of office space are approaching the Tokyo levels, and users are loudly complaining that the charges of the container terminals in Kwai Chung are the highest in the world.<sup>17</sup>

Technical factors aside, the economic explanation also needs further investigation. Hong Kong's connection with China is mainly in the Southern part of the country and concentrates on light industries, i.e. it is at best partial. As far as cultural affinity is concerned, investors from Taiwan (who are now the second largest outside source of direct investments for China) and overseas China in Asia or the West can claim at least equal advantage. For multinational corporations investing in infrastructure and heavy industries, Hong Kong could hardly offer them any service that helps to reduce cost in a significant way. Moreover, in "using" Hong Kong's experience and connection, foreigners need not invest in Hong Kong at all. They can just form partnerships with big Hong Kong companies and pour money into China. The impact on the Hong Kong economy could be minimal, unless the profits are massively repatriated by the Hong Kong partners.

These do not mean that Hong Kong would lose all its functions. Nothing like that is going to happen. They do however point to the possibility that Hong Kong might get a smaller share of the pie in the future. But if the absolute size of the pie gets bigger, or much bigger, that should not be much of a worry. What would cause concern is that if significant "diversion" does take place and asset inflation in Hong Kong continues (because of monopoly and profit repatriation), Hong Kong will have to undergo further "structural transformation" to keep ahead of other competing cities and regions in China. In the end, only "high-risk, high-returns" activities would find it viable to be based in Hong Kong. So ironically, Hong Kong will be further "Manhattanized" under such a scenario. The trouble is that only a limited proportion of the population can engage in these activities. The social consequences may be rather daunting.

## **TACKLING THE FUTURE**

Although everything is possible in the future, I have to make a guess. What actually happens will probably be characterized as a case between the "rosy" and the "worst-case" scenarios, and is likely to be nearer to the former. The economic integration in Southern China will in my view go on, and could withstand major political upheavals, unless they are of the disastrous kind. Even if China decides to contain and assimilate the Hong Kong economy or if

significant diversion occurs naturally, growth in the future SAR would still be very decent by world standard, at least *on average*.

If so, the structural tendencies that I described above will become more entrenched. Hong Kong will increasingly be "Manhattanized" (even the recent architectural landscape seems to be suggesting that), if not actually achieving comparable stature. People who are not able to benefit from the "China boom" will be under great pressure and progressively marginalized, while the rich and the super-rich live in glamorous styles.

We should certainly try our best to maximize the benefits and minimize the costs of such a historical course of development. Overall, for the long-term welfare of the territory, I think that a balance has to be struck between industry and service, prosperity and equity, although the temptation to go for where quick profits can be earned is always great, as testified by the experience of the past decade.

Some would argue that the de-industrialization of Hong Kong is nothing to worry about. It is not necessary for Hong Kong to have any manufacturing industries at all. New York has no such industries, so is the case of Tokyo, London, or Paris. Such a comparison is however misleading, because Hong Kong is supposed to be a separate economic system under the Joint Declaration and the Basic Law. After 1997, Hong Kong will continue to issue an independent currency, keep its fiscal autonomy, and determine its own migration policy. So the Hong Kong economy cannot not be fully integrated with the Mainland because there will not be totally free flows of monetary, fiscal and human resources.

Hong Kong people will not be able to migrate to Guangdong in the same way that US citizens move from New York to Detroit, so any structural unemployment in Hong Kong cannot be easily solved by an expedient transfer of human resources to the north. In the case of a fiscal or a balance of payments crisis, Beijing is not supposed to come to our rescue. We also have to look after our inflation and distribution problems. In a nutshell, Hong Kong is a very special case of regional economics: it is more like Singapore in ASEAN than New York in the US or Tokyo in Japan, minus the politics of course.

So perhaps Hong Kong should not be the "Manhattan" of Southern China, but its "Shanghai". A possible mode of operation for Hong Kong's industries is the combination of China's capabilities in technological R & D with the territory's expertise in design, packaging, and commercialization.

Alternatively, Hong Kong, Shenzhen, and Guangzhou could serve as a cluster of "southern Shanghais", with Hong Kong functioning under a separate category. Then we should all make genuine efforts to climb the technological

ladder and maintain a viable industrial base, which would bring long-run benefits. It would be foolhardy to abandon totally our short-run comparative advantage. Trading and service sectors should no doubt be further promoted, but not one-sidedly. Such a balanced strategy can only be implemented through conscious effort by the authorities with regard to macroeconomic and microeconomic policies, and cooperation by the enterprises and the private sector.

As for the appropriate industrial mix, due to historical and economic considerations, Hong Kong and Southern China need not duplicate Shanghai's efforts in developing or upgrading heavy industries such as iron and steel, petrol-chemical and automobile. We should concentrate on the lighter, the less "land-intensive", the more "skill-and-design-oriented", and the more "intellectual-labour-intensive" industries such as computers, consumer goods based on the new material sciences, audio-visual and optical products etc. It would be industrialization with "southern Chinese characteristics". We probably have more to learn from the experience and the planned development strategy of Singapore and, to a lesser extent, Taiwan rather than those of Japan and South Korea. The latter are probably better models for Northern China and Shanghai itself.

Moreover, Hong Kong and Guangdong should coordinate with each other and establish a framework of division of labour, which avoids excessive structural duplication in activities and unnecessary competition, not only in industries, but also in services.

I know that it is not easy to strike a balance between industry and service in Hong Kong. It goes against the prevailing mood of fetching easy money and requires visionary courage on the part of the authority and far-sighted entrepreneurs, which may be lacking around the 1997 transition. So while I would still urge the adoption of the balanced strategy on intellectual grounds, I am prepared to retreat to my second line of defence. I think that problems such as inflation and income disparity, which have arisen from the so called "structural transformation" of the local economy need to be addressed. Even a more balanced developmental pattern could alleviate but not eliminate them. Reactive and remedial measures by the authority will be necessary to contain their harmful social consequences. If primary market trends cannot be reversed, redistributive and protective measures should become more proactive.

In Hong Kong's case, a central provident fund (or more logically a pension scheme of the "pay-as-you-go" type), unemployment benefits, capital gains taxes (at least on property speculation), a revamp of the taxation system to introduce higher progressivity and to plug the loopholes arising from the



economic integration in Southern China, fair trade and anti-monopoly laws - to name just a few - should have been introduced years ago if the government had paid serious attention to the unfolding socioeconomic trends. And even with all these, Hong Kong would still be a long, long way from the social-democratic welfare state of the Western type.

In this regard, the future SAR government in Hong Kong might perhaps be less constrained by the self-imposed laissez faire ideology of the colonial authority, which is increasingly out of touch with reality and in conflict with its own practice. Of course, things could turn worse should "money politics" replace "sanitized colonialism" in the post-1997 era.

The future of Hong Kong is as exciting as it is uncertain. So much depends on our relations with Mainland China and the outside world, and the unfolding patterns of international geopolitics and geoeconomics, which could take unexpected twists and turns, into uncharted territories. However, there is a real chance for Hong Kong to become a great metropolis of the 21st Century. Whether it would be one with a human face and one that fits into a rational development framework of a glorious China at ease with itself and the world is not totally outside our control.

## ACKNOWLEDGEMENTS

This paper has been extended, partially revised and given a new title after the Conference and I have benefitted from discussions with Lau Nai-keung, Wong Chark-kie, Mok Tai-kei, Cheng Ai-lun, Cheung Kar-hing and Hung Ching-tin. While their comments have put pressure on me to think more deeply about various issues, all the views expressed here remain idiosyncratically my own.

## NOTES

1. *Hang Seng Economic Monthly*, Hang Seng Bank, Hong Kong, June 1993.
2. Such estimates and projections have their own problems. Even if they are accurate, there is still nothing much to cheer about. When China surpasses the United States as the largest economy in the world, on PPP calculations, its per capita income would still be *one-fifth* of the latter's because of the sheer size of its population, already the world's largest. See TSANG Shu-ki, "China Becoming the Third Largest Economy in the World?" (*in Chinese*), *Ming Pao*, Hong Kong, 16 June 1993, pp.33.
3. *Sunday Post*, Hong Kong, July 4 1993.
4. For a more elaborate analysis of such a possibility, see TSANG Shu-ki,

- "Loss of Control in China?" (*in Chinese*), *Wide Angle*, Hong Kong, July 1993.
5. I still think that there is a chance that the Chinese authority could "muddle through" the present difficult situation and successfully engineered the economic take-off. The basic reasons include the non-existence of deep ethnic, ideological and religious divisions in the country, and the fact that most people are now fighting for a better life rather for survival, thanks to the foundation built by the gradualist reforms of the past 14 years. If you want a colour TV to replace the black-and-white oldie, you do not kill others for that. See TSANG Shu-ki, "Swinging between Breakthrough and Gradualism: Comments on the 'Decisions' of the Third Plenum of the 14th Central Committee of the CCP" (*in Chinese*), *Wide Angle*, Hong Kong, December 1993; and TSANG Shu-ki, "Dynamic Economic Growth in Greater China: Prospects and Problems", a talk presented at the international conference on *New Patterns in North-South Relations: Economic, Political and Environmental Conditionality for Aid, Trade and Investment*, organized by the Foreign and Commonwealth Office, British Government, Sussex, 13-17 December 1993.
  6. See TSANG Shu-ki, "The balancing act that few can hope to achieve", *Sunday Post*, Hong Kong, 12 February 1993.
  7. TSANG Shu-ki, "Inflation", in Joseph Y.S. CHENG and Paul C.K. KWONG (eds.), *The Other Hong Kong Report 1992*, Hong Kong: The Chinese University Press, Chapter 23, 1992.
  8. See TSANG Shu-ki, "Income Distribution", in CHOI Po-king and HO Lok-sang (eds.), *The Other Hong Kong Report 1993*, Hong Kong: The Chinese University Press, Chapter 19, 1993.
  9. YANG Ming, "Need for Brand New Thinking, Policy and System" (*in Chinese*), *Hong Kong and Macau Economy*, No.7, 1992, pp.17-18.
  10. YANG Ming, *ibid.*
  11. These problems are apparently recognized by the top officials in Guangdong. See the interview of ZHU Shen-lin, the Guangdong Governor in the report "What are Guangdong's Pressures, Advantages, Difficulties, and Responses?", *Shenzhen Commercial News*, March 16, 1993, p.1 (*in Chinese*).
  12. Even the most open outpost of the province, Shenzhen, fails to develop much high-tech or capital-intensive industries. See ZHAO Zhi-ying, "Why So Few Big Projects of Foreign Investment Settle in Shenzhen?" (*in Chinese*), *Economic Reporter*, Hong Kong, October 12, 1992, p.26.
  13. *Hang Seng Economic Monthly*, Hang Seng Bank, Hong Kong, October 1993.

14. The warning to Hong Kong about the need to adjust to the change in the developmental pattern of its "hinterland" was also sounded by another panelist, Prof. WANG Jian, in the same session of the *Conference on Chinese Cities and China's Development* in which an earlier version of this paper of mine was presented. See his paper "China's Economic Development Plan for the Next 50 Years" (*in Chinese*).
15. See TSANG Shu-ki, "The Chinese Economy Marching onto a New Plateau?" (*in Chinese*), *Ming Pao*, Hong Kong, 1 & 2 February 1993.
16. See SUNG Yun-wing, *The China-Hong Kong Connection: The Key to China's Open Policy*, Cambridge University Press, 1991; and SUNG Yun-wing, "The Economics of the Illegal Trade between Taiwan and Mainland China", paper presented at the International Pacific Rim Conference of the Western Economic Association, Hong Kong, 8-13 January 1994.
17. *Wen Wei Po*, Hong Kong, 22 February 1994, p.5.



**NATIONAL URBAN POLICY  
AND URBANIZATION TRENDS  
IN CHINA**



## 5

### **LARGE CITIES VERSUS SMALL CITIES - The Debate**

*Yixing ZHOU*

#### **THE ORIGIN AND DEVELOPMENT OF NATIONAL URBAN GROWTH POLICY IN CHINA (NUGP)**

Since 1949, the government of China has continuously put forward different city policies to guide and control city development according to the prevailing circumstances. During the period of Mao Zedong, China's city policies were mainly made in accordance with Mao Zedong's ideology and this influence continues to the present day.

Early in 1945, Mao Zedong accurately predicted in his work "On United Government" that "Farmers: these are the predecessors of the workers of China. In the future, millions of farmers will enter cities and factories. If China wants to build a strong national industry and many modern big cities, there will be a long process for transforming agricultural population into urban population" (Mao, 1945). This process, as told by Mao Zedong, is actually the process of urbanization that we refer today in our study. At that time, he linked the building big cities, the process of developing national economy and the process of urbanization together.

The guiding policy of city construction during the First Five- year Plan were "building key points and developing steadily" and we achieved comparatively good results. Focusing on the layout of 156 major projects, new industry cities were to be built as focal points, such as Taiyuan, Baotou, Lanzhou, Xian, Wuhan, Datong, Chengdu and Luoyang. These have quickly developed into big cities and super-large cities (Cao and Chu, 1990).

Since the late 1950s, especially since early 1960s, the relationship between China and the western countries had not shown any improvement and that of China and the former USSR became tense. Following the severe estimation on

international situation, Mao Zedong's thought on the city changed, from the initial idea of "concentration" to that of "dispersion" and began to emphasize "controlling the scale of the big cities and developing small cities." The following examples typically describe his thoughts:

He said in February 1956, "it is necessary to reduce the population size in cities like Shanghai. If war breaks out, it would not be good for such a large population to crowd in coastal cities." In August 1958, he said, "whether in the city or in the countryside, socialism should be combined with communism.... The city should carry out 'rural working style and the habit of guerrilla warfare'. The city governors should connect with the masses. In the future, some big cities should be decentralized and resident concentrations of 20,000 to 30,000 people should have all that is needed. Villages are small cities, from where philosophers and scientists will most probably come...". In 1960, in his note for the second half of his text book of political economics, he wrote, "cities in the future need not be very big. We should disperse the city population to the countryside and build many small cities. Should atomic war occur, this would be more advantageous." In June 1961, when he was meeting the British Marshal Montgomeroy, he said, "it seems that it would not be good for the cities to be too big. Cities with population of 400,000 or 450,000 to 50,000 are of a good scale." In May 1964, he noted, "we should pay attention to the distribution of industry, and create the First, Second and Third lines. In the past, we only cared about relations between coastal and inland regions. Now, we should develop a sense of war and we need have a broad rear- area." In June 1965, at the Hangzhou Meeting of the Communist Party, Mao said, "in order to develop small towns, we should carry out the same policies as that for small cities. I have read some materials recently, and have found that there are only 140,000 people in Bonn. Isn't it good?" "To work out our plan, we should consider three factors: war, famine and the life of the people (Zhi, 1987)".

Under this guiding thought, from the late 1950s to 1976, the State Council and the State Construction Commission emphasized again and again the need to seriously carry out the policies of strictly controlling the scale of big cities and developing the small cities. Yet actually, these policies had not been put into effect. During the period of Difficult Time (1961-63) and Cultural Revolution (1966-76), even the work of city planning was suspended and city construction was in a state of disorder. Newly-built industrial areas took Daqing as their example, and avoided constructing concentrated cities. It was stressed that the Third Line industry should move into the mountainous areas and caves and the use of the city form to organize industry was denied.

During the 60s and 70s, the urban population moved in an opposite direction into the countryside. The big cities developed very slowly; small



cities did not developed and the number of incorporated towns even decreased (Cao and Chu, 1990).

After the "Gang of Four" was overthrown, the resurgence of cities in China was facing tremendous difficulties: seriously unbalanced proportional relationship of the national economy, financial deficit, shortage of consumer goods, the dual peaks of fertility and the return of school graduates to the cities, and the heavy city employment pressure. During this time, the accumulated result of a long-term lack of investment in urban infrastructure became more and more explicit, especially in big cities, where all kinds of "urban sickness" broke out. Under this situation, the former guiding thought was again followed and used to control the new severe situation without timely reassessment. In 1978, at the Meeting of National 3rd City Affairs, the NUGP was officially set: "to control the scale of the big cities and to develop more small cities and towns".

After 1978, China implemented several years of "readjustment, reforms, consolidation and improvement" in order to strengthen agricultural production and light industry, reduce the scale of heavy industry and infrastructure and reduce the production of slow-selling products. This readjustment has caused depression in many heavy industrial centers and big multi-functional cities for some time. Compared with them, a group of medium-sized and small-sized cities which concentrated on light and textile industries developed quickly and became "star cities". Economic reforms in the countryside also demanded a complete change of the small cities from their long term shrinkage. Therefore in 1980, at the Meeting of the National Urban Planning Work, the policy toward medium-sized cities was adopted. The NUGP were to "control the scale of big cities, rationally develop medium-sized cities and actively develop small cities". At the same time, a big city in urban areas has been defined as where non-agricultural population is over 500,000; for the medium-sized city, non-agricultural population is from 200,000 to 500,000; for the small city, non-agricultural population is less than 200,000.

1980s was a decade when political thoughts were as active as ever in China. During this period, academic circle launched heated arguments about urban policies. Both the supporters and the opponents all expressed their own reasons. Debaters put forward all kinds of opinions on the wording of NUGP and the criteria of city scales. But none was adopted by the government. At the Meeting of National City Construction Work held in December 1986, the policies set at 1980 and the criteria for city scales were reaffirmed.

After that, the NUGP were incorporated into the Draft of the City Planning Act which was directed and written by the Ministry of Construction and the wording was revised as "to control the scale of big cities, rationally develop medium-sized cities and small cities". At the end of December 1989, the Draft

of the Act was submitted to the Standing Committee of National People's Congress and was approved. During the consideration period, the national city development policy was readjusted to "strictly control the scale of large cities, rationally develop medium-sized cities and small cities". According to the explanation of the related departments, the reason for this change was that "the scale of the large cities has not been completely and effectively controlled"; therefore, we need to "strictly control" it, whereas "small cities which develop very fast need to be guided by plans and need to be brought into the track of rational development" (Urban Planning Division of Construction Ministry, 1990).

When the NUGP were put in law, the heated dispute seemed to drop in temperature, but the crux of the matter has not yet been resolved.

### **DEBATE BETWEEN A LARGE CITY STRATEGY AND A SMALL CITY STRATEGY**

Centering on the NUGP of 1980, the academic circle launched a heated dispute during the 80s. The focus of dispute was "whether or not we should control the scale of the large city; is developing small city (town) the only way for urbanization in China?" Opinions on this dispute can be summarized as the following: (1) Small cities oriented; (2) Urban-rural integration oriented; (3) Large cities oriented; (4) Medium-sized cities oriented; (5) The view that large, medium-sized and small cities all have their rational structure.

Although supporters of "city-rural integration" have not put forward a clear and definite concept, their theory basis is similar to that of the "small city" supporters. These bases are all originated from some thesis of the Marxist classics and they are all supporters of NUGP; therefore their opinions can be classified as the same opinion as the "small cities oriented" ones. Although supporters of "large cities" are not definitely against the development of small cities, they oppose the policy of considering developing small cities as the main way or the only way of urbanization in China. They actively advocate the development of large cities and are the opposing faction of the NUGP. The last two arguments are strongly neutral.

#### **Main Arguments of the "Small Cities-Oriented" Approach**

- 1) Having their basis in Marxist classics, they think that "to reduce or even eliminate the difference between city and country is an important task of socialism", and "most probably the balanced distribution of big industries in the whole country is a condition for eliminating the split between the city and the country". According to their view, city

(especially big city)'s development runs counter to this aim. Therefore, they advocate the development of small cities and towns to the full and advocate an integral whole of industry and agriculture and a merging of city and country. They did not notice that there are also many expressions in those classics that can be used to deny such opinions (Zhou, 1984; Rao, 1993).

- 2) Basing on the differences among social systems, a lot of people who hold this opinion believe that urbanization, especially rapid increase of the number of big cities and incessant expansion of their scales, are the evil consequences of capitalism. In the present advanced capitalist nations, such phenomena like population and industries being evacuated to the outer area of big cities have appeared. This indicates that capitalism has developed in a roundabout way and China cannot follow the same old disastrous road (Chinese Society of Urban Science, 1984). In a word, it seems that big cities belong to capitalism, not socialism. They have misunderstood city development in modern western countries and have themselves some simplified biases in ideology.
- 3) Some have a sound base on the conditions of the nation. China has a large population and little cultivated land, and the contradiction of people and land is very sharp. After 1949, because we, over a long period of time, pursued the policy of "taking grain as the key link" and neglected the "diversified economy"; in field of circulation, state-operated commerce was in a state of absolute monopoly; in system of household registration and all kinds of social welfare policies, there was a split between city and country for a long time. Before our reforms and opening, small cities and towns had declined greatly. Surplus labour had accumulated to a total of several hundred million in the countryside. Farmer were living a difficult life. After the Responsibility contract system was carried out in the countryside, how to transform this immense agricultural surplus labour has very quickly become the most important matter in the rural- and urban-development in China. Because our government is unable to financially support those farmers into the cities, and cities also have much unseen unemployment and their ability to absorb labor is limited, to develop township-run industry, and to rejuvenate and develop small cities and towns have become an irresistible urge. This is the requirement and also necessity of development.

In 1984, Mr. Fei Xiaotong published his famous thesis "Small Town and Big Problems"(Fei, 1984). With a great deal of first-hand data

obtained from south of Jiangsu Province, he summarized the types of small towns in China before 1949 and undertook an in depth analysis of the internal and external mechanisms of the decline and rejuvenation of small towns after 1949. He stressed the significance of a "diversified economy" and also "township-run industries" for the development of small towns, and stressed the important function of small towns as centers of commodity circulation, services, culture and education of rural areas. Fei Xiaotong treated the small town as a component of the urban system. His ideas are well-formulated and have a sense of propriety. His article does not involve the issues about controlling or developing large and medium-sized cities.

Yet, people who hold the opinion that "small cities are the focal points" later expanded this idea. Such opinions like Chinese farmers "leaving the land but not leaving the countryside, whereas entering the factory but not entering the city"; there is a need to "to digest surplus labor on the spot"; "small towns should work as a reservoir in the process of transforming rural population to urban population" and "the development of small towns is the only way forward for urbanization in China" etc., have become the main arguments for a while. They also considered it an important feature of socialism with Chinese characteristics (Chinese Society of Urban Science, 1984). In 1984, China lowered the criteria for designated city and town, and the number of cities increased from 289 in 1983 to 517 in 1992; at the same time, designated towns administered by counties increased from 2786 to 10587. The rapid increase was quite astonishing. Of the increase, there was a certain component of compensating for the past, but also of man-made over-heating.

In this debate, some people indicate that there are several difficult problems involved in the strategy of promoting the development of small towns by way of "leaving land but not leaving the countryside". Under the condition of the traditional collective ownership of agricultural land, township-run industries will definitely be in an extremely dispersed state including dispersion of enterprise location and capital, and this would cause the lack of a mechanism for them to concentrate in small cities and towns. Dispersion causes the overuse of precious cultivated land. It is estimated that the average land per capita used in township-run industry is ten times more than that of the industries in cities (Cheng and Hu, 1991; Gao, 1991). Dispersion causes areal diffusion of environmental pollution. The government cannot effectively administer all these village pollution sources, not even to say control; dispersion also brings low economic return. Only because average capital investment per capita for township-

run industry is comparatively low, although output is far behind that of the city, that income from rural industry is much higher than that from agriculture. Thus farmers can obtain comparatively more benefit. Also, it can solve the problem of surplus labour, thus has apparent social benefits. Thus this form is still vital. But from a long-term point of view, "leaving the land but not leaving the countryside" is just a kind of transition. Those farmers who have completed transforming their jobs from agriculture to nonagriculture will accomplish spatial movement-- "leaving land and leaving the countryside too" and really join the surge of urbanization (Zhou, 1993)(Meng, 1990).

### **Main Arguments of the "Large Cities" Approach**

- 1) People who hold this opinion think that "the forward development of large cities is a general rule in all nations after the industry revolution, i.e., population's growth rate in big cities is higher than that of all other cities and is much higher than that of the total population"[Hu, 1986]. "To control the development of big cities is a kind of human manipulation which is contrary to the objective law of the economy's development and the city's development." Also, "large cities are 'super gold coffer' of a country, and is a locomotive that can bring along rapid and effective development of cities and towns." Thus the "policy to control the population in large cities is a one-sided policy that is divorced from financial economic benefits"(Wang, 1985). Their opinions were acutely against those expressed at the forum entitled "Problems of Large City Population and Their Solutions" at the end of November, 1984 and thus had a strong influence.
- 2) The main basis for advocating the development of large cities is that the economies of both agglomeration and scale in large cities are higher than those in medium-sized and small cities. During debate, people who advocate for small towns think that in order to transform the same number of surplus agricultural labor to city population, the cost needed for small towns is far less than that of big and medium-sized cities. Yet many others who adopt the cost-benefit analysis approach argue the average output per capita, output per employee, output per land area and output per unit investment have all shown that the ratio of benefit and cost becomes bigger and bigger with the rise in the city scale. Therefore, the development of large cities is most beneficial (Long and Zhang, 1989; Rao, 1988). Still others analyze the marginal benefit of the investment. They argue that in cities with more than 2 million people, their additional

industrial output from an additional unit of investment is much higher than that of cities at other different scales (Table 5-1)(Long and Zhang, 1989). Mr. Guo Fansheng's analysis also shows that the multiple input coefficient of large cities with more than 1 million population is distinctly lower than the national average, but that of the medium-sized and small cities is much higher than the national average (Table 5-2). This indicates that the comparatively higher output level of large cities with over 1 million population in China is not the consequence of centralized investment by the government, but is instead acquired with less investment from the government (Guo and Wang, 1988). Those who are against large city state that comparatively higher economic benefit of large cities are not unconditional. They must pay a considerable cost. Besides the regular cost, other costs need to be included to develop large cities, such as the cost of converse scale economic benefit; threshold cost in the development of large cities; regional opportunity cost of developing large cities, and dispersion cost of developing large cities (Jin, 1988).

- 3) Some scholars demonstrated that large cities not only have superiority in economic scale benefit, but also in social scale benefit, environmental scale benefit and construction scale benefit, etc (Rao, 1989). They further extend the conclusion obtained from city-size classes analysis and believe that "the bigger the size of the city, the better the city's benefit" is an objective law (Rao, 1988).

**Table 5-1 R's Values of Different City Sizes in the Three Regions of China in 1985 and 1986 (Yuan/100 Yuan RMB)**

City-Size Class (in 1000)	Regions			Whole country
	Eastern	Central	Western	
>2000	166.7	217.5		174.1
1000-2000	79.0	50.3	9.1	60.3
500-1000	82.5	90.6	26.6	75.8
200-500	61.2	78.1	51.0	68.2
<200	66.2	51.2	25.1	52.8
Total cities	114.7	91.9	27.3	99.4

Source : Long Guoqiang and Zhou Lijie (1989)

Note :  $R = \Delta TP / \Delta Q = \{ \text{Newly added industrial output value (Yuan)} \} / \{ \text{Newly added industrial fixed assets (100 Yuan)} \}$

**Table 5-2 Comparison of Investment and Output in Different City Sizes in 1985**

Index	City-Size Class (in 1,000)					All 324 cities
	>2,000	1,000-2,000	500-1,000	200-500	<200	
Unified Output Index	1.392	1.089	0.890	0.754	0.639	1
Unified Input Index	0.867	0.941	1.115	1.115	1.2000	1

Source : Quo Fansheng and Wang Wei (1988)

### **Main Arguments of Those supporting the NUGP**

Those who support the NUGP, in addition to actively advocating the development of small cities, also put forward their support for the policies of "controlling large city's size" in 1980s. Their reasons can be summarized as follows: (1) They believe that the population growth rate in large cities was too fast and the population in large cities has been out of control for quite a long time (1949 to 1982) (State Science and Technology Commission, 1985). (2) They believe that there are too many large cities in China, which number is the greatest in the world (Chinese Society of Urban Science, 1984; State Science and Technology Commission, 1985). (3) They believe that the city scale structure of China is an is too heavy at the top and the proportion of large cities population in total city population is too high (Chen and Zhang, 1981; Sun, 1983). (4) They believe that large cities can bring city sickness and that the serious shortage of urban infrastructure in large cities is caused by the overgrowth of population. (5) Growth of large cities is an evil result of capitalism. I have explained with a great deal of data that these views lack sufficient bases in terms of both facts and theoretical formulation. The main reasons for these incorrect conclusions lie in their ideology and understanding, their ways of comparison and their misuse of both the city concept and statistical specifications (Zhou, 1990).

### **Main Arguments of the "Medium-Sized Cities" Approach**

Those advocating the "medium-sized cities" approach believe that either large cities or small cities have insurmountable malpractice. Only the medium-sized cities have merits of both kinds of cities and can eliminate malpractice in both large and small cities. These people advocate establishing an urban network with the development of medium-sized cities as centers (Song, 1988,1990).

### **Main Arguments of Those Believing in the Rational Structures of all Large-, Medium- and Small-Sized Cities**

People hold this perspective advocate improving the city scale structure and forming a rational urban system. Some people made detailed suggestions: in the east of China, the development of small cities and towns should be the main task; in the middle part of China, the development of medium-sized cities should be the main task; in the western part of China, we should mainly develop big cities.

The above two approaches seem neutral and above criticism, but as to the question of what kind of scale structure is rational, even they themselves cannot explain clearly.

### **Debate within the Administration**

The dispute is also reflected on the wording of the NUGP. Mr. Jiang Meiqiu has once suggested the revision of the policy to "making the most of the economic function of big cities, strictly control the scale of super large cities, properly control large cities, rationally promote the development of medium-sized, actively foster those small cities and towns." Besides the newly added content of making the most economic function of large cities, this scheme separated the large cities into two classes: strictly controlling the scales of the super-large cities with population of more than 1 million, while properly controlling the scales of the large cities with population of 0.5 to 1 million (Chinese Society of Urban Science, 1984). Yet, compared with the policy enacted in 1980, this scheme is not different in nature

Another kind of opinion comes from National Land Bureau of the State Planning Commission. They suggest redefining the criteria of city-scale classes as: super large city with population of more than 4 million; large city with population between 1 and 4 million; medium-sized city with population between 0.3 and 1 million; small city with less than 0.3 million. According to this criterion, they suggest changing the policy to "try to control scale of super-large cities, carefully develop large cities, actively develop medium-sized and small cities (Fang and Liu, 1988)". This suggestion retained the original three-



sentence form the former policy basing on the city scales, but the content included has been cleverly changed. It reduced the scope of city scales to be controlled to several cities with population of more than 4 million, whereas many large cities with population of 0.5 to 4 million which were formerly in the scope of being controlling can now be carefully or actively developed in the new suggestion.

Concerning the dispute on large cities and small cities, there have been many other influential articles (Zhang, 1983; Chen and Chen, 1982, Feng, 1983, Guo, 1980, World Economic Herald, 1986). I have only made a succinct summary here and the list is far from complete.

## **MY PERSONAL VIEWS**

From the beginning when I first engaged in the study of urban geography, I have always hoped that my work can provide some references for formulating policies for the country. Starting from this good wish, I have engaged in a series of fundamental research projects centering on the NUGP of China, and have formed my own views.

Many of the above introduced discussions were based upon divided concepts, analysing methods and binding conditions. If the discussed topics are about "whether or not developing large cities" and "whether or not developing small towns", then the viewpoints of both the large city approach and the small town approach have certain reasonable supports. The reason is for a country with a considerable scale, especially a big country like China, it will always be formed by a great deal of cities with different scales. Cities in different layers of the urban system, whether large, medium-sized or small ones, have their own specific functions and cannot be substituted by others. After 30 years of slow progression, urbanization in China has entered a stage of all-round rapid growth, just like the development of the economy. Each scale of city class should be complementary and integrated with each other. The development of small cities includes the elements for transforming them into large cities. At the same time, the development of large cities can initiate the development of medium-sized and small cities.

But, if we use the development of small cities to repel the development of large cities or stress the development of large cities to an improper degree and use it to repel the development of small cities and towns, then these arguments are not persuadable.

Although there were many changes of strategies in the NUGP and many antagonistic opinions in the dispute, surprisingly their idea framework are quite similar. All debates used the framework of city scale, either to develop

the cities of a particular scale-class or to control the cities of another scale-class. I call these kind of policies as "city size-oriented policy". In fact it is quite inconceivable to simply use such scale policy as the general guiding strategy to guide city development in such a big country. The reasons are, on theoretical level:

- 1) Although population size is one of the most important characteristics of a city, city scale is determined by the city function and is the carrier of the city function. The functions of cities in China are now in a state of great fluctuation and development. Those who want to control the construction of a city by way of controlling the city scale have not gripped the critical point of the question and are therefore unable to achieve an ideal result.
- 2) City function is mainly determined by all kinds of internal and external conditions in the development of any city. Those cities with superior geographical location, convenient external transportation, wide hinterland, plentiful natural and human resources, solid economic foundation, and advantageous situation, will inevitably develop, for example, coastal open cities and cities with special economic zones like those in the 1980s and 1990s. To forcefully control the scale of this kind of cities (often large and medium-sized), it will cause a reduction in the growth speed of the national economy. For the same reason, to forcefully establish cities at bad locations will cause immense loss, like the third line industry points scattered in remote mountainous areas.
- 3) With the promotion in the city scale-classes, there is a general gradual increase in the economic benefits of the city and this has been proved by many people using large data sets. Therefore at the current stage, it is not appropriate to say "to control the large city" in general. The intensive usage of land and the comparatively lower birth rate in large and medium-sized cities have uncommon socio-economic significance (Table 5-3). On the other hand, city economic benefit and its size have a very weak positive relationship and there is no steady causal relation between them (Table 5-4)(Zhou, 1988). Multi-factor analysis of urban economic benefit in China shows that the decisive factors that affect the difference of industrial economic benefits in cities of China are the fixed value assets owned by the city labour (i.e. intensity of investment) and the industrial structure of the cities, not city size (Table 5-5). The influence of the city size factor on city industrial economic benefit varies greatly in different areas: In remote areas, it is the first of the seven factors and in inland areas, it is the fourth; in coastal areas, it drops to the fifth (Table 5-6)(Zhou

**Table 5-3 Annual Natural Population Growth Rate in Different City Sizes in 1980 and 1991**

City-Size Class (in 1000)	>2000	1000-2000	500-1000	200-500	<200
1980	6.01	7.25	6.43	7.86	7.98
1991	3.16	5.02	6.33	8.45	9.01

Source: Zhou Yixing (1984)

**Table 5-4 Correlation Coefficients Between NIOV \*, Per Capita (Y1), Per Industrial Employee (Y2) and City Size (X)**

	$y=a+bx$	$y=a.xb$	$y=a.ebx$	$y=a+blgx$	$1/y=a+b/x$	$lgy=a+blgx$
NIOV	0.088	0.408	0.257	0.122	0.500	0.408
Per Capita Analysis						
NIOV	0.065	0.273	0.240	0.070	0.197	0.273
Per Worker Analysis						

Source : Zhou Yixing (1988)

\* NIOV : Net industrial output value

and Yang, 1990). Therefore, the overemphasis of the economic benefit of large cities and a conclusion of "The larger the better" is dangerous (Richardson, 1988).

- 4) China covers a broad inland area. There are great regional disparities in urban hierarchies. According to my study, there are six distinctive types of provincial-level urban hierarchies. Each type has its own characteristics and weaknesses, and each is in a different stage of evolution. Under this complex situation, there is no one "city-size oriented policy" that can be used in all provinces in China (Zhou and Yang, 1986).

**Table 5-5 Standard Regressions Coefficient of NIOV\* and APTP\*\* with Seven Causal Factors in Three Regions in Chinese Cities in 1984**

Number of Cities	NIOV* 285	APTP** 283
City Size	0.1371[5]	0.3322[2]
Industrial Investment Density	0.6935[1]	-0.1722[3]
Transport Index	0.0656[7]	0.1678[4]
Distance From Ports	-0.1570[4]	-0.1402[5]
Enterprise Scale Index	-0.1960[3]	-0.1113[7]
Industrial Set-up Index	0.3747[2]	-0.5924[1]
Specialization Index	0.0918[6]	-0.1341[6]
Correlation Coefficient	0.8815	0.7058
RF-Statistics	137.93(2.71)	39.00 (2.71)

Source : Zhou and Yang (1990)

\* NIOV : Net industrial output value per urban industrial employee

\*\* APTP : Annual profit and tax provided by per 100 yuan industrial capital  
 [] Order of importance  
 () Theoretical value of correlation test

From a practical point of view, scale policy is difficult, if not impossible, to operate:

- 1) The statistical criteria of city scale in China have serious defects. Using cities Handan (0.86m), Yichun (0.80m) and Wuxi (0.84m) as examples, we can see that their city spatial structures are totally different, but their population statistics are quite close according to their population in the city proper. How can we guide these three cities with the same policy? Furthermore, for such cities with similar spatial structure and population of 0.5 million, for example, Baoding (0.48m) and Kaifeng (0.52 m), why should we adopt two different policies to "rationally develop" and "strictly control" them respectively?
- 2) The scale policy uses 1 million, 0.5 million and 0.2 million as limits to classify city sizes and then treats different size classes differently, namely

**Table 5-6 Standard Regression Coefficient of NIOV\* with Seven Causal Factors in Three Regions**

Regions	East Coast	Interior	Outlying Areas
Number of Cities	104	150	41
City Size	0.0556[5]	0.1493[4]	0.3825[1]
Industrial Investment Density	0.9596[1]	0.4397[1]	0.1275[5]
Transport Index	0.0366[7]	-0.0044[7]	0.1745[4]
Distance from Ports	-0.0897[4]	-0.0158[7]	-0.0193[7]
Enterprise Scale Index	-0.2325[2]	-0.1282[5]	-0.1211[6]
Industrial Set-Up Index	0.1478[3]	0.3534[2]	0.2977[3]
Specialization Index	0.0487[6]	0.2123 [3]	0.3787[2]
Correlation Coefficient R	0.9593	0.7611	0.6022
F-Statistics	158.349 (2.84)	27.92 (2.77)	2.68 (3.24)

Source : Zhou Yixing (1990)

NIOV : net industrial output value per urban industrial employee

[] : order of importance

() : theoretical value of correlation test

to "control", "strictly control", "rationally develop" and "actively develop". The limits of the scales are clear, but the meaning of the policy is indistinct. What is meant by "control" and "strictly control"? Is there development in "control"? Is it to develop in control or to control development? What kind of "development" can be defined as to "actively develop" or to "rationally develop"? Do we need a "rational" limit for "controlling" and "actively developing"? It is difficult to guide practice without clear definition.

To implement NUGP, the city's master planning after 1980 has generally been detached from reality and has artificially lowered the planned population. Several typical examples are listed in Table 5-7. The planned population scales (generally referred to the year 2000) were all surpassed quite early. This has not only weakened the scientific nature and the feasibility of city planning, but has also indirectly caused a serious shortage in urban infrastructure. The greater the lack of infrastructure, the more the people want to control city population and thus forming a vicious circle.

**Table 5-7 Examples of Selected City Plans Which Artificially Reduce the Size of the Planned Population**

City	Base Period	Population in Base Period (1,000)	Forward Planning Population (1,000)	Year Planing Approved	Actual Population 1985 (1,000)	1992 (1,000)
Huhhot	1974	404	500	1979	568	664
Lanzhou	1977	815	900	1979	1,1743	1,239
Changsha	1978	738	850	1981	959	1,157
Nanning	1978	432	600	1982	599	766
Taiyuan	1980	1,144	1,350	1983	1,391	1,568
Anshan	1980	968	1,100	1983	1,109	1,224
Chengdu	1980	1,460	1,500	1984	1,591	1,783
Zhengzhou	1981	860	1,000	1984	1,003	1,200
Fuzhou	1981	654	750	1984	784	909
Nanchang	1982	835	1,000	1985	909	1,118
Guangzhou	1983	1,930	2,000	1984	2,570	2,996

Source : adapted from city master planning documents

- 3) The obscure meaning of the scale policy makes the estimation of the policy effects arbitrary. Some people concerned has explained the scale policy as: "controlling the size of large cities means to control urban population and the scale of land use, but not to control the development of economy; to control the population of large cities means mainly to control the resident population, excluding floating population (Urban Planning Division of Construction Ministry, 1990; Chen Weibang, 1990). In fact, in less than four months after the new NUGP was approved, China has decided to develop and open Shanghai Pudong District. This is the largest city expansion plan in China's history and it will be carried out in the biggest city in China. A new area of 200 square kms with 2 million population will come into being. The decision to develop Pudong is completely correct, but how can we link this action with the policy of "strictly controlling the scale of the large cities"? In 1991, the resident non-agricultural population in Shenzhen was 0.432 million, whereas temporary population reached 0.766 million, and Shenzhen was already a super large city. Then how can we explain Shenzhen's development by the scale policy? In the last ten years, the number of small cities in China and

**Table 5-8 Comparison of Average Annual Growth Rate of Urban Population (AAGR) Between 1964-80 and 1980-89**

City Size (in 1,000)	No. of Cities in 1964	AAPG (%) 1964-80 (1)	No. of Cities in 1980	AAGR(%) 1980-89 (2)	Rate Index (2)/(1)
>2000	5	3.59	7	24.16	637
1,000-2,000	8	10.95	8	25.41	232
500-1,000	18	14.89	30	28.47	191
200-500	43	23.55	70	34.22	145
100-200	51	26.78	62	44.91	168
<100	42	38.10	46	70.39	185
Total	167	15.87	223	31.63	199

Source : Zhou Yixing (1993)

the population proportion of the small cities has clearly increased in the whole city scale structure, while the number of large cities and their proportion of population has decreased to a certain degree. This situation is often regarded as a great achievement of the NUGP (Zhang and Wu, 1991). Compared with the situation before our reforms and opening, small cities and towns have achieved actual development. But this accomplishment as reflected in statistical data has many problems, as during the time concerned, "many counties were changed to cities" and "townships were changed to towns". Through administrative means, it is very easy to change the national urban hierarchy. However, this is just a change in form, not a real improvement in nature.

In the 60s and 70s when many people think the population in large cities expanded excessively, the actual growth rate of population in the large cities was very low. On the contrary, in 80s when many people think that we have achieved much in implementing the policy of controlling the scale of the large cities, the actual growth rate accelerated clearly (Table 5-8). Entering the 90s, the process continues. Confronting this contradictory phenomenon, many people may just say, "without this policy, the population of the large cities will increase even faster; therefore, we still need to effectively and strictly control the population in large cities"!

Yet those who face reality squarely should admit that the NUGP in China is facing severe challenges. There exists a very big gap between the

subjective cognition of the policy makers and the reality of city development. Whether or not can the new scale policy effectively guide social practice is in doubt.

### **Summary of My Own Opinions**

I do not support the large city theory generally, nor do I generally support the small city theory. China has entered a new period of social economic development. National and international situations, as well as the general strategic goal of the country have all changed a lot comparing with those of the past. The present NUGP is a result of past specific historical background. It does not suit the national goal of the present time and the near future. Concerning the extremely complicated socio-economic phenomena of urbanization and city development, there are great limitations of employing the city scale policy, which uses the population index, as a national general policy of city development. This kind of policy has little effect in many countries and it is especially not appropriate to China with her low level of economic development and urbanization and great regional disparity. Now as all kinds of cities in China are in rapid growth, many new problems have been emerging. This urges our government to provide deeper and more effective macroscopic guide in perfecting the city development mechanism, building a scientific city goal model, promoting the comprehensive benefits of the city, readjusting the fundamental structure of the city and perfecting the network of the urban system.

### **REFERENCES**

- CAO, Hongtao (1984), "The Development of Guideline to Urban Planning in China", *City Planning Review*, No. 5, pp. 12-15. (in Chinese)
- CAO, Hongtao and Chuanheng CHU (eds.) (1990), *Contemporary China's Urban Construction*, Beijing: China Social Sciences Press. (in Chinese)
- CHEN, Kewen and Xiangke CHEN (1982), "On Urbanization is not the Only Way in China", *Seeker*, No. 5, pp. 27-32. (in Chinese)
- CHEN, Weibang (1993), "On the Theory and Policy of Urban Development in China", *China's Large Cities*, Tianjin: Tianjin Science and Technology Press, pp. 1-12. (in Chinese)
- CHEN, Yuguang and Zehou ZHANG (1981), "Adjusting Population Structure and Prompting Economic Development," in Ma Hong and Sun Shangqiang (eds.), *Studies in the Problems and Economic Structure in China*, Beijing: People's Publishing House, pp. 482-525. (in Chinese)



- CHENG, Jiyuan and Biliang HU (1991), "The Study on Population and Labour Force of Urbanization" *The Macro Research on the Way of Chinese Urbanization*, Harbin: Heilongjiang People's Publishing House, pp. 88-115. (in Chinese)
- CHINESE SOCIETY OF URBAN SCIENCE (1984), Report on "Symposium of Population Problems in Large Cities and the Way to Deal with Them", Chengdu. (in Chinese)
- FANG, Lei and Hong LIU (1988), "A Preliminary Study on the Problem of Chinese Urban Classification and Urban Development", *Acta Geographica Sinica*, Vol. 43, No. 1, pp. 74-78. (in Chinese)
- FEI, Xiaotong (1984), "Small towns with Grave Problems", *Jianghai Academic Journal*, No. 1. pp. 6-26. (in Chinese)
- FENG, Yufeng (1983), "Is it the Only Appropriate Way of Urbanization to Development Small Cities in China?", *Economic Geography*, No. 2, pp. 136-140. (in Chinese)
- GAO, Peiyi (1991), *The Comparative Study on Urbanization Between China and Foreign Countries*, Tianjin: Nankai University Press. (in Chinese)
- GUO, Fansheng and Wei WANG (1988), "Scale of Cities and Benefit of Cities - Rethinking on the Present Principle of Urban Construction in China", *Economic Theory and Business Management*, No. 3, pp. 10-17. (in Chinese)
- GUO, Zhenhui (1980), "The Trend of Urbanization in the World and Some Issues of Urban Development in China", *Population and Economy*, No. 2, pp. 1-7. (in Chinese)
- HU, Zhaoliang (1986), "Overdevelopment of the Metropolis and the Way to Deal with It", *Journal of Peking University (philosophy and social science edition)*, No. 5, pp. 116-120. (in Chinese)
- JIN, Xinzhong (1988), "Metropolitanization: Strategy and Its Limiting Factors", *Journal of Nankai University (philosophy and social science edition)*, No. 1, pp. 3-17, 67. (in Chinese)
- LI, Mengbai (1984), "The Proper Interpretation and Implementation of the Basic Policy in China's Urban Development", *Cities and economic Regions*, Fuzhou: Fujian People's Publishing House, pp. 263-275. (in Chinese)
- MAO, Zedong (1945), "On Coalition Government", *Selected Works of Mao Zedong*, Beijing: People's Publishing House, pp. 1029-1100. (in Chinese)
- LONG, Guoqiang and Lijie ZHANG (1989) "Rethinking and Development of China's Urbanization: On National Urban Growth Policy", *Tomorrow and Development*, No. 2, pp. 32-36. (in Chinese)
- MENG, Xiaochen (1990), "Two Lines, One End for the Way of China's Urbanization", *Urban Problems*, No. 1, pp. 10-13. (in Chinese)

- RAO, Huilin (1988), "Large and Super-large Cities are the Focal Points of Economic and Social Development in China", *Urban Development Strategy and Management*, Lanzhou: Gansu People's Publishing House, pp. 132-141. (in Chinese)
- RAO, Huilin (1989), "A Preliminary Study of Urban Economics of Scale", *Social Sciences in China*, No. 4, pp. 3-18. (in Chinese)
- RAO, Huilin (1993) "Some Regularity in Development of Cities and City Economy", *China's Large Cities*, Tianjin: Tianjin Science and Technology Press, pp. 67-80. (in Chinese)
- RICHARDSON, H.W. (1988), "Whither National Urban Policy in Developing Countries?", *Urban and Regional Policy in Korea and International Experiences*, Seoul: Korea Research Institute for Human Settlements, pp. 171-200.
- SONG, Shuwei (1988), "Modern Social Structures in China: Developing Urban-Rural Networks Centered on the Medium-sized City", *Urban Problems*, No. 3, pp. 23-26. (in Chinese)
- SONG, Shuwei (1990), "The Idea of the New Medium-size Cities as Core", *Urban Problems*, No. 1, pp. 3-9, 17. (in Chinese)
- STATE SCIENCE AND TECHNOLOGY COMMISSION (1985), *Blue Book, No. 6, Technological Policy, Urban Rural Construction in China*, Beijing: SSTC. (in Chinese)
- SUN, Jingzhi (ed.) (1983), *An Introduction to Chinese Economic Geography*, Beijing: Shangwu Publishing House. (in Chinese)
- URBAN PLANNING DIVISION OF CONSTRUCTION MINISTRY (1990), *The Explanation on City Planning Act of the People's Republic of China*, Beijing: Mass Press. (in Chinese)
- WANG, Yuan (1985), "Give Full Play to the Superiority of Large Cities", *Social Investigation and Research*, No. 2, p. 51. (in Chinese)
- World Economic Herald*, July 7, 1986; September 1, 1986; September 29, 1986.
- ZHANG, Cheng'an (1983), "Urbanization is not the Way of Urban and Rural Development in China", *Construction Economics*, No. 2, pp. 18-21. (in Chinese)
- ZHANG, Wenhou and Yi WU (1991), "The Correct Policy of Developing Cities in China", *Urban Development*, No. 5, pp. 3-6. (in Chinese)
- ZHAO, Shixiu (1992), "Adhering to the Urban Growth Policy", *Chinese Cities Marching Forward to the 21st Century*, Taiyuan: Shanxi Economy Press, pp. 69-78. (in Chinese)
- ZHI, Kai (1987), "Annals of Important Affairs in Urban Economic Construction in the People's Republic of China (1949- 1980)", *Supplement to Reference Information for Mayors*, No. 1. (in Chinese)

- ZHOU, Yixing (1984), "On the Necessity of the Urban Development Strategy of Stages", *Acta Geographica Sinica*, Vol. 39, No. 4, pp. 359-369. (in Chinese)
- ZHOU, Yixing (1988), "On the Relations between Urban Industrial Output Level and the Size of the City", *Economic Research*, No. 5, pp. 74-78. (in Chinese)
- ZHOU, Yixing (1990), "Rethinking about the National Urban Growth Policy of China", *Urban Economic Research (Heilongjiang Province)*, No. 1, pp. 1-16. (in Chinese)
- ZHOU, Yixing (1993) "The New Trends of China's Urbanization in 80s", *Chinese Cities and Regional Development: 21st Century in Prospect*, Hong Kong: The Chinese University Press, pp. 105-131. (in Chinese)
- ZHOU, Yixing and Qi YANG (1986), "A Review of the Urban-size Hierarchy and Their Territorial Types at the Provincial Level", *Acta Geographica Sinica*, Vol. 41, No. 2, pp. 97-111. (in Chinese)
- ZHOU, Yixing and Qi YANG (1990), "Multiple Analysis of China's Urban Industrial Economic Benefit", *Economic Geography*, Vol. 10, No. 1, pp. 43-50. (in Chinese)



# 6

## THE URBAN AGGLOMERATION OF CHINA

*Shimou YAO*

The term "Urban Cluster Area" appeared in urban research references after World War II. In the early 1970s, D. Brunn and Jack Williams, two American urban geographers, introduced the term "Urban Agglomeration" in their book "Cities of the World". The eastern coastal riparian region from Boston to Washington (or Richmond of Virginia) was the first to be called urban cluster area. In addition, the coastal region of the Pacific Ocean from Tokyo to Osaka in Japan and the belt from London to Manchester in Britain were also taken as urban cluster areas.

In the recent 50 years, Beijing-Tianjing, Shanghai-Nanjing-Hangzhou area, central Liaoning Province and the Pearl River delta began to form urban clusters since cities in these areas developed rapidly (Figure 6-1). Clusters are mainly controlled by the two laws of regional economic development: one is that the development of cities and regions are mutually interacted, and the other is that cities and communication networks act on each other. It is very important in research and application to analyze the development process, types and spatial distribution patterns of cities and urban clusters. Based on the research work on urban geography and regional development, this paper will discuss the theoretical problems about urban clusters in China.

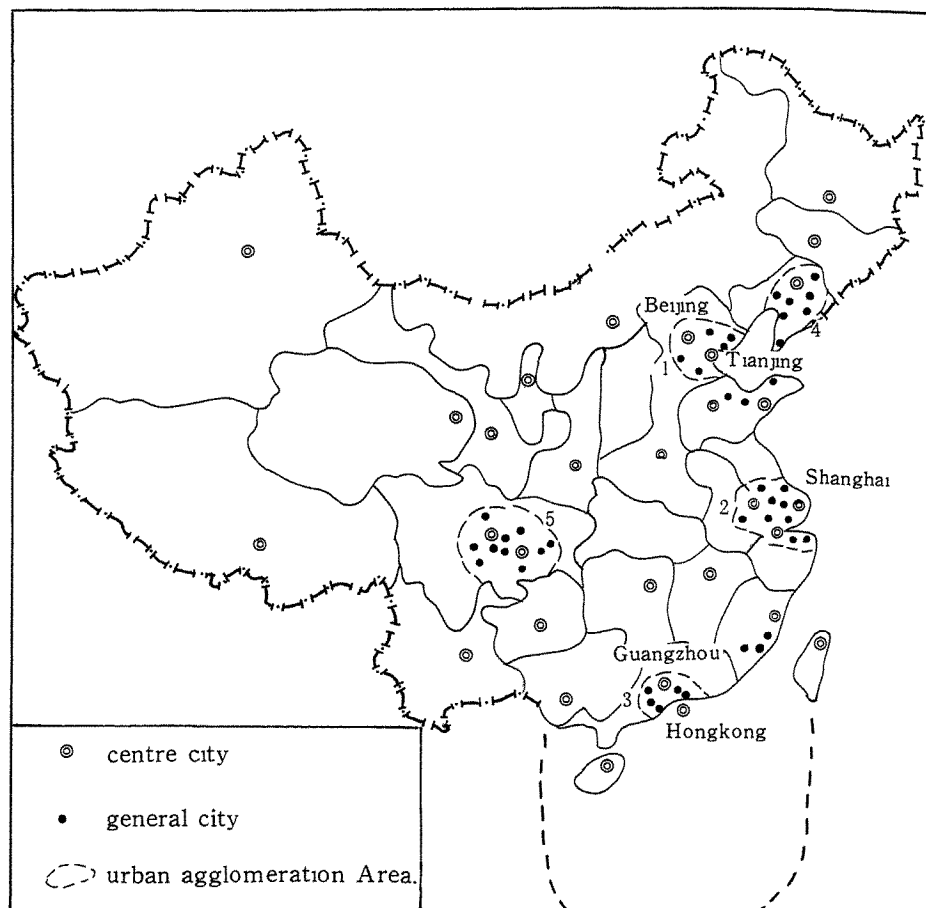
### **BASIC CONCEPTS OF URBAN CLUSTERS AND THE CHARACTERISTICS OF URBAN CLUSTERS IN CHINA**

The formation and development of cities are the evident symbols of heavily agglomerated social productivity and the concrete reflection of human social progress. Cities are the major spaces of human residence, industry, transportation and commercial service. When lots of cities concentrate in a region and

form urban clusters, the regional productivity must have developed greatly. Therefore, it can be concluded that the formation of urban clusters in a region is an important evidence of regional modernization.

From the view of spatial pattern and relations among cities, urban clusters can be defined as relatively integrated urban groups in a certain area under certain geographical environment and conditions. Internal relations and affinities are developed among cities of different scales based on comprehensive transportation networks and modern communication facilities.

**Figure 6-1 Major Urban Agglomeration Areas in China**



1. Beijing-Tianjing-Tangshan Area

2. Shanghai-Nanjing-Hangzhou Area

3. The Pearl River Delta

3. Centre Liaoning Province Area

5. Xichang Basin Area

Since they are complexes of physical, social and economic elements and regional infrastructure, urban clusters are fairly active subsystems in the large geographical environment, they also have the basic characteristics of networks not only at regional level but also in mutually interacted space. In fact, they are entities of regional economic development. Urban clusters and urban system are similar regional concepts. They are identical in many aspects, and as a matter of fact, urban clusters is a part of the regional urban system. Certain differences also exist between urban cluster and urban system since urban system is a common concept in a large region, but urban cluster is an agglomeration of cities in a rather small area.

Urban clusters have close relations not only with regional urbanization but also with the agglomeration and spread of cities. The process of urban agglomeration and spread has effect on regional development especially in the core area, as the central city play a decisive role in regional development. The spatial difference of economic factors and non-economic elements causes spatial interactions and activities among cities or between urban and rural regions in urban clusters. All the spatial interactions have certain common characteristics and obey certain common principles (such as market principle and scale economy principle). It is these kinds of activities that integrate all economic and social activities in different regions and construct vast and complicated spatial relations in urban clusters. According to the analysis of the formation and development of China's urban clusters, the development of urban clusters has three main characteristics:

- 1) The development of urban clusters has close relations with the biggest and most active city in the cluster, such as Beijing in Beijing-Tianjing-Tangshan area, Guangzhou in the Pearl River Delta, Shanghai in the Yangtze River Delta, Shenyang in central Liaoning Province. Population of their primary cities grow very fast in those urban clusters (Table 6-1).
- 2) The major cities in a region spread continuously from center to the peripheral areas; new city nodes appear along the economic corridors (important transportation routes) and then evolve into new cities. Because of the concentration and development of urban functions, new residential area become important nodes in the spatial spread process. Cities expand around these growth points, and the introversion and intensification of urban clusters are enhanced greatly. Medium and small scale cities develop continuously and evolve into large cities. Meanwhile, large cities are replaced by metropolitan areas. There are two contrary forces working in urban clusters: the heavy forces of productivity and population towards concentration, and the forces of population migration and information

**Table 6-1 Population Change of Primary Cities in China's Urban Clusters (Unit: 10,000)**

Cities	1936	1953	1970	1980	1991	Major Functions
Beijing	115.1	276.8	366.0	454.8	581.0	National Capital, famous historical city
Shanghai	372.7	620.4	576.4	598.3	760.5	Largest industry and commerce centre of China
Guangzhou	122.2	159.8	187.5	228.9	295.5	Largest industry and commerce centre in southern China
Shenyang	52.7	229.9	224.6	284.4	364.1	Largest heavy industry centre in North-Eastern China

exchange towards urban spread. These are the spatial characteristics of urban cluster development.

- 3) The development of urban clusters is open in space, having indistinct boundaries. Urban clusters are dynamic systems. When an urban cluster develops to a certain extent, it changes from a close-system to an open-system because of the increase of regional productivity and the improvement of interregional infrastructure (especially highways, trunk railroad and communication facilities). Boundaries among clusters become indistinct. Urban clusters in eastern coastal region of China, for example, have developed rapidly since 1979. This development has close relations with the open-door policy and the introduction of foreign investment and joint-venture. Openness to outside world promotes the development of the industry areas, residential areas and urban service facilities in cities.

The dynamic development and change of spatial patterns of urban clusters result in the indistinct boundaries among clusters. The central Liaoning urban cluster, for instance, includes Shenyang (the central city), Fushun, Benxi, Anshan, Liaoyang, Tiening and Yinkou etc. within a radius



of about 100 - 150km, and cities in this range have close economic cooperation traditionally. There is also a bigger range covering a radius of over 200km, including Fuxin, Jinzhou, Panjin and Dandong etc. There is no quantitative index to define the definite boundaries of urban clusters, and in fact, their boundaries are indistinct. It is the indistinct boundaries that show the strengthening of relations among urban clusters; therefore, it is not necessary to fix definite boundaries among urban clusters or between urban and rural areas.

## **TYPES AND SPATIAL DISTRIBUTION OF CHINA'S URBAN CLUSTERS**

Agglomeration and the spread process are complicated social and economic phenomena in urban clusters, which depend on certain regional background and physical conditions. Burgess, a sociologist in Chicago University, thinks that those elements affecting urban sprawl include centripetal force, centrifugal force, specialization and separation. However, geographer Hoyt emphasizes transportation accessibility and directional inertia. Having summarized researches by these predecessors, Hawley concluded in 1981 that there are four factors affecting urban spread: (1) absolute population pressure; (2) specialization and mutual competition of urban functions which drive out disadvantageous functions; (3) the aging of physical structure which promotes cities to spread to advantageous locations; (4) The revolutionary advances of short distance transportation. Therefore, the formation and development of urban clusters have close relations with urban spread, cohesive force, radiation function, physical background, transportation and communication networks of each city.

China has a vast territory, and there are great differences among regions regarding their complicated physical conditions, unequally distributed resources, historical development process, the degree of economic exploitation and productivity levels. Regions of urban clusters have formed into different types during the long history. There are three ways to classify urban clusters, according to urban scale, function structure and spatial distribution patterns respectively.

### **Urban Clusters Classification Based on Urban Scales**

According to the combined characteristics of urban clusters, urban scales, economic bases and physical environments, urban clusters in China can be classified into three rank sizes:

**A. *Large Scale or Super Scale Urban Clusters***

Beijing-Tianjing-Tangshan area, Shanghai-Nanjiang-Hangzhou area, the Pearl River Delta urban clusters are examples of this type. The economic center of these clusters are super cities or large cities. These urban clusters not only have one or two national central cities, but also have regional economic centers. These cities possess strong economic capacities, strong industrial bases and high-level science, technology, culture and education. There are strong population flow, material flow, information flow and monetary flow among cities. They can play the role of active and strong national economic centers (Table 6-2).

Population densities in the leading cities of these urban clusters are high, and these cities are also short of land and resources although land utility is high. But these cities possess certain resource potential, favorable physical background and strong economic radiating forces, and they tend to be extrovert and internationalized. In these urban clusters, service radii of leading cities are about 150-200 km, and they may have nation-wide effects.

**B. *Medium Scale Urban Clusters***

Their economic centers are large or medium cities. Cities cooperate harmoniously in economy. They generally have good economic base, great industrial potentials and have accessible local transportation networks. Changsha-Xiangtan-Zhuzhou urban clusters in central Human Province is a typical example in a provincial economic region. Both agriculture and industry are quite flourishing; there are close economic relations among cities; the service radius is about 80-100 km; their economic radiating areas are provincial or inter-provincial ones. This kind of urban cluster is just at the stage of rapid economic growth.

**C. *Small Scale Local Urban Clusters***

The characteristics of this kind of clusters are that cities scatter in the region; there are no close relations among cities generally, and they are under the attracting ranges of large cities. Their economic centers or regional central cities are mainly medium or small scale cities with less developed industry, and agriculture is important in regional economy. Xiamen-Zhangzhou-Quanzhou urban cluster is an example. Before economic reform, its industry was quite backward; transportation conditions were inaccessible; economic relations and trade contacts among regions were relatively undeveloped, and this region was still at the stage

Table 6-2 Three Large Urban Clusters in the Eastern Coastal Region of China

Urban Clusters	Major Cities				Regional Characteristics	Degree of Urbanization (%)	
	City Number	National	Regional	Regional		Metropolitan Area	All Region
Beijing-Tianjing-Tanshan Area	9	Beijing Tianjing	Tangshan Zhangjiakou Chende		Extra large, cities expand rapidly. Distances among cities are small. Industry, especially heavy industry are flourishing.	60-65	50-55
Shanghai-Nanjing-Hangzhou Area	19	Shanghai	Nanjing Hangzhou Ningbo Wuxi Suzhou		Cities and towns are densely distributed. Distances among large and medium size cities are small. Industry and agriculture are flourishing. Cities tend to form continuous regions.	67 (Shanghai)	42-45
The Pearl River Delta Area	12	Guangzhou Hong Kong	Shenzhen Zhuhai Fushan Zhongshan		Cities and towns are densely distributed. Distances among them are small. Manufacturing industry, commerce and trade are flourishing. Cities and towns tend to form continuous regions.	65-68	38-40

of traditional economy in which agriculture and industry coexisted in the region. After this region opened to the outside world, a foreign-oriented economy (especially joint ventures) and local manufacturing industries developed rapidly. But its raw- and semifinished- materials industries, heavy industry and chemical industry are still weak; its urban scale remains small; and the average urban density of the region is low because urban population is small. Currently, populations in built-up areas in Xiamen, Zhangzhou, Guanzhou are only 390,000, 178,000 and 184,000 respectively. In addition, there is only one county-level city, Shishi with a population of 69,000.

### **Urban Cluster Classification Based on Urban Function and Economic Structure**

According to urban functions, regional economic structure, industry structure and developing trend of the region, urban clusters can be classified in-to four types.

#### ***A. Urban Clusters in Which Cities Have Manufacturing Industry as Their Main Functions***

Urban density in this type of clusters is high, and quite a lot of cities agglomerate in a relatively small area and form belts or urban groups. They are one of the urban spatial pattern in those regions which have high urbanization degree and economic development level. Generally, this type of urban cluster locates in the regions which have advantageous location, flourishing agriculture, accessible transportation networks, rich physical resources for integrated exploration and good conditions for opening. Urban clusters in Shanghai-Nanjing-Hangzhou and in the Pearl River Delta belong to this type.

In dense urban areas with flourishing manufacturing industry, urban clusters mainly have the following characteristics: (1) The history of economic exploitation of the region is long, and the population density and agricultural intensification degree are high; (2) they take one super city or several large cities as economic centers, whereas cities and towns are densely distributed in the region; (3) manufacturing industries are quite flourishing, while raw material industries, heavy industry and chemical industry have grown rapidly since 1949, and these regions are national or inter-provincial economic attracting regions (Table 6-3); (4) there are close economic relations among cities or between urban and rural areas, and information spread rapidly. Cities of different scales are hubs of population

**Table 6-3 Industrial Structure in Shanghai-Nanjing-Hangzhou Area  
(unit: %)**

Industry type	1980	1985	1988
Light and Textile Industry	40.48	34.86	35.15
Equipment-Producing Industry	27.45	28.77	30.85
Raw Material Industry	29.51	33.33	32.15

flow, material flow and information flow at different levels; (5) they tend to be international oriented, their international trade, culture, science and technology exchange and tourism are of high grade. Famous international cities, such as Shanghai and Guangzhou, are allocated in the region of this type.

**B. Urban Clusters Which Have Flourishing Raw Material Industry, Heavy Industry or Chemical Industry**

These regions possess relatively rich underground resources or are close to sources of raw materials. Lots of cities develop there on the basis of mineral resources exploration and utilization. Based on resource exploitation and comprehensive processing, several large and medium scale cities have established a relatively integrated industry system taking heavy industry as their key sector. Regional transportation especially railways are well developed, so are the land transportation networks between cities and industry-mining districts or among cities. In central Liaoning Province, for example, based on coal mines of Fushun and Benxi, iron ore, lime and refractory minerals around Anshan and Liaoyang, there formed an urban cluster of industry and mining agglomeration. Six railroads radiate from Shenyang, the center of railroads, and these railroads connect many large or medium scale cities such as Dalian, Benxi, Fushun, Fuxing, Yinkou, Dandong and Anshan. These cities have close relation in economic cooperation and form mutually depending urban system. The super urban cluster of Beijing-Tianjing-Tangshan area, including Baodin and Zhang Jiakou belongs to this type.

The basic characteristics of this type are: (1) Energy industry, heavy industry and transportation (especially railways) are flourishing; transportation networks are densely distributed. They are also close to large scale energy base; electric energy supply is sufficient with dense

electrified wire networks, and communication systems are quite developed; (2) cities having heavy industry as main functions are major cities; production cooperation are the major relations among cities, whereas raw materials and fuel transportation are major contents of regional transportation; (3) urban locations are advantageous, many cities such as Beijing, Tianjing and Shenyang are key military posts; (4) urban ecological environment and air quality are generally poor; urban pollution is serious, and under-ground water levels in cities continuously fall.

***C. Urban Clusters in Which Agriculture Is the Main Economic Sector, but Industry Has Developed to a Certain Extent***

Cities in this type belong to the pre-industrialized society, where productivity and economy are still at low levels. In quite a long time, agriculture has been the main economic sector, and productivity has not develop until modern social reform. Underground minerals are scarce in the regions; raw material industries are less developed, whereas transportation facility and urban infrastructure are weak, so the evolution of urban clusters is incomplete. Urban clusters in the coastal riparian of FuJian Province, in Chao-Shan Plain and in southern Zhejiang Province are examples. Urban industry and transportation are less developed; urban scales are generally small; radiating forces are weak, and urban functions are limited. There are only weak relations among cities or between urban at rural regions. Urban attraction is relatively low. Only after reform did these urban clusters grow at higher speeds based on advantageous locations (close to Hong Kong, Macau, Taiwan and south-eastern Asian countries) and the favorable policy.

***D. Urban Clusters in Which Railway Networks Connect All the Cities***

Cities of this type are generally small, and relations among regions were weak in the past. After the building of railway trunk lines or multiple tracks, a relatively integrated urban system has been formed. Zhenzhou-Luoyang urban cluster in Henan province belongs to this type. Another example is the urban cluster in central Shangdong province, including Jinan (the central city), Zhibo, Tainan, Laiwu, Qufu and Xintai. Depending on its economic, political, cultural and tourist factors, and based on flourishing railroads and land transportation networks, a medium scale urban cluster has formed in this region.

## **Urban Classification Based on the Spatial Distribution Patterns of Cities**

According to the spatial distribution patterns of the urban areas and the spatial structures of the cities, China's urban clusters can be classified into four types:

### ***A. Group Agglomerative-Type Urban Clusters***

Since physical conditions, historical bases and industrial agglomerations are different within a region, several urban groups have formed in it. A large urban cluster can be divided into several sub-clusters, and each sub-cluster has its own economic center or center of attraction.

### ***B. Urban Cluster Belts Developed Along Transportation Corridors***

This type of urban cluster is mainly affected by the direction of rivers, railroads or trunk lines. Cities distribute along these transportation axes, and new cities such as industrial cities, satellite towns and transportation hubs have been developing continuously in these regions.

### ***C. Radiative Urban Clusters***

They are mainly controlled by topography or transportation lines. Their cities scatter in regions and urban scales are generally small. As transportation trunk lines radiate from center to many directions, cities will distribute in a radiative manner.

### ***D. Agglomerative-type Urban Clusters***

They are similar to type 3, but cities distribute without certain order. Urban distribution are controlled by complicated physical conditions (especially resources, topography and rivers) and transportation conditions, and cities scatter in their regions in a chaotic manner. Huainan, which represents groups of local urban areas and towns in Anhui Province, for example, has formed an urban and town agglomeration as long as 50km because of the restriction of coal resources distribution, alignment of railway lines and topography. Some urban clusters in a vast region also distribute like this pattern. For example, in the Pearl River Delta, three local urban clusters have combined and developed into a large urban cluster. These three local clusters are the one taking Guangzhou as its center; that taking Hong Kong and Shenzhen as its centers and that taking Zhongshan, Zhuhai and Macau as its centers.

## CONCLUSION

According to China's national conditions, urbanization will speed up in the next 20 or more years. Urban clusters resulting from agglomeration and expansion will also grow at high speed, and they will improve themselves in the future.

The important dynamics to control and develop urban clusters are a type of rational and coordinated development. It is of no benefit in application only to emphasize any single city, because each large or medium city is part of a complicated urban system. Cities in a cluster not only promote each other, but also restrict each other. From the view of integrated development and rational spatial distribution, it is important to analyze the concrete problems of each city thoroughly and carefully, to discover methods to solve contradictions, and to promote coordinated development and rational control of urban clusters.

China is vast in territory, which results in obvious difference in the historical basis and economic levels among regions. In addition, construction conditions are different because locational conditions are different. Therefore, it is important to consider national conditions, local conditions and urban conditions in an integrated way, to decide urban development in view of the entire region, to define the development directions of the cities and to manage urban functions and scales rationally.

## REFERENCES

- BRUMN, K. and J. WILLIAMS (1978), *Cities of the World*, N.Y.
- HARRIS, C.D. (1959), "Suburbs", *Reading in Urban Geography*.
- SIT, V.F.S (ed.) (1985), *Chinese Cities*, Hong Kong: Oxford University Press.
- TAIOR, Griffith (1946), *Urban Geography*, New York: E. P. Dutton.
- YAO, Shimou (1988), "Several Issues of Development Strategy of China's Urbanization", *Urban Science*, Vol. 3. (*in Chinese*)
- YAO, Shimou (1991), Development and Trend of Urban Geography, *Scientia Geographica Sinica*, Vol. 11, No. 1. (*in Chinese*)
- YAO, Shimou (1992), "The Urban Agglomerations of China", *Urban Problems*, The First Issue, Beijing. (*in Chinese*)



# 7

## **URBANIZATION TREND IN CHINA - Coastal, River, and Interior Cities in China's Development**

*Anthony Gar-On YEH*

Urban system in most countries is influenced by market forces. Cities which produce goods and services that are in demand and are attractive to live in will have faster growth than those which do not. Government generally has little direct influence on the development of the urban system. After World War II, especially in the last two decades, urban systems in the Western countries are influenced by the regional shift in production as a result of the restructuring of the economy and there is very little the government can do in reverting this trend.

In the past, before the adoption of open door policy in 1978, the government played an important role in urban system development in China. Politics and public policy were the two most important factors in shaping urban development (Lo, 1987). They exerted a strong influence over the growth of urban population (Xu, 1984a), urban system development (Chang, 1976; Xu, 1984b), city system development (Yeh and Xu, 1990a and 1990b), and provincial distribution of urban population (Yeh and Xu, 1984). However, the importance of the role of government in shaping urban system development has been increasingly reduced since the adoption of economic reforms and the open door policy in 1978.

In the past, the ability of the Chinese government to exert a strong influence on urban development was mainly through population control and resource allocation. A household registration (*hukou*) system was established in 1954 to stop unauthorized migration from the countryside to the cities and uncontrolled growth of large cities. It divided the population into agricultural (*nongye renkou*) and non-agricultural (*fei nongye renkou*), which was used in conjunction with the food rationing system to regulate the monthly quotas of foodstuffs, consumables, and consumer durables (Kirkby, 1985). The

household registration system required all neighbourhood residents to register with their local police station. In collaboration with lower level civilian officials, police ran late night household registration checks to ensure that people did not move into the neighbourhood without proper registration. The household system in controlling the population in cities was effective because of the widespread rationing of foods and state control of jobs and houses through the late 1970s. Without a proper neighbourhood registration, one had no access to many highly subsidized and otherwise unavailable consumer necessities such as grain, cloth, oil, pork, bean curd, and soap. The predominantly publicly owned housing was not accessible and same was the over 90 percent of all state and collective controlled jobs (Whyte and Parish, 1984). The household system was further tightened by a migration law in 1958 that limited the entry of peasants into cities, except those who had obtained work permits from the labour bureau. The household registration system was effective during the Cultural Revolution (1966-76) in sending youths to the countryside. There was an absolute decrease in population of the large cities, with a net decrease in the total population of the city system (Yeh and Xu, 1990a and 1990b). Some of the extra-large and large cities were even depopulated to become large and medium-sized cities.

Before the open door policy in 1978, with population control and resource allocation, the Chinese government was remarkably successful in shaping the urban system according to their public policy and ideology. The growth of large cities was successfully curtailed, small towns were developing rapidly, and the number of cities and city population were successfully shifted from the coast to interior and border locations. These were the result of a centrally controlled government. Many of the means needed to achieve these results are not available in other countries. Without tremendous central control over human mobility and economic resources, it would not be possible to control the population and to allocate resources to desired places successfully. It was the control over jobs, housing, and the necessities of daily life that made it possible to control immigration and thus population growth in the cities. It was the centralized ownership of industry that made it possible to shift resources from larger, coastal cities to cities in the interior. All these have been changed with the adoption of the open economic policy in 1978.

## **ECONOMIC REFORMS AND URBANIZATION IN CHINA**

1978 is a major turning point in the development of China. At the important meeting of the Communist Party in December 1978, it was decided to focus the country's efforts not on politics and "class struggle" but on economics and

the Four Modernisations - modernization in agriculture, industry, national defence and technology. This involved reducing the dominance of central state planning and permitting the more market-led economy. This also included an "open (door) policy" to open up China to world markets and foreign investments and to promote economic and technical co-operation with other countries. The adoption of economic reforms and open door policy has a profound influence on the economic development and urban system development in China. Economic reforms have improved the economy of the country and at the same time work together with the open door policy in integrating China with the world economy. Economic reforms have freed the market from the rigid state controlled economy towards a more vibrant domestic market. The increase in domestic market alone could not achieve the economic growth that China experienced in the 1980s. Insulated from the world during the Cultural Revolution, it needed foreign investment and foreign technology, particularly production technology, to speed up its economic development and upgrade its production.

The 1978 economic reforms opened China's economy to foreign investment and market processes, reintroduced the private individual economy (*geti jingji*) with individuals owning their means of production and earning their living through their own labour and commodity economy (*shangpin jingji*). Since the adoption of the economic reform policy, a series of reforms follows. Since 1978, economic reforms that affect urban system development in China are mainly rural reform, open door policy, and urban reform.

### **Rural Reform**

The early reforms mainly affected the rural areas, where communes were replaced by a production contract, household responsibility system. Rural land was distributed to households according to their household size, and each household bore the sole responsibility to fulfill a predetermined production quota. After meeting the production quota, they were free to produce whatever they like and could sell their products to the free market. Households could also contract to run agricultural production units such as duck farms, fish ponds, or orchards. This system has replaced the original commune system where farmers worked together and obtained their pay according to the number of work-points made. This reform has aroused the enthusiasm of farmers by the new system of "more pay for more work". Rural production has increased tremendously after the introduction of the rural reform. There is an increase in the number of "specialized households" which make use of their special production skills. Households who preferred to engage in non-

agricultural activities were allowed to sublease their plots to other people. The surplus labour freed from agriculture due to the increase in the productivity of farmers and has stimulated the development of small enterprises in the rural areas, giving rise to rural urbanization.

### **Open Door Policy**

Foreign investment was considered conducive to economic development in China. Foreign investment is used as a means of overcoming the shortage of domestic funds and as a means to improve China's management, productivity, and competitiveness so that more may be exported to earn foreign exchange and increase employment. Foreign investment is also used to build the connection of China into the world economy. Foreign investment is an important instrument of economic change in China (Kueh, 1992). A range of financial, legal and infrastructural inducements were given to foreign investors, including tax holidays, easy remittance of profits, and prepared sites with services and buildings. The bureaucratic procedures for investment and customs were simplified and special economic zones and special districts were established for attracting foreign investment.

### **Urban Reform**

An urban reform was officially launched by the Third Plenary Session of the Twelve Central Committee of the Chinese Communist Party in October 1984 by adopting the policy of reform of the economic structure. It tried to introduce the rather successful rural economic reform which gave more incentives to individual efforts in the urban sector. It consisted of expanding the autonomy of enterprises, giving material incentives to workers, loosening planning and price controls, replacing state investment with credit finance for industrial development, encouraging small-scale private enterprise and allowing market forces to determine the distribution of goods and services. Enterprises were allowed to retain and allocate investment, plan production, hire and dismiss employees, and to determine bonuses and prices. These reforms were mainly aimed at enterprises but because most of the enterprises are located in the urban areas, they were referred to broadly as urban reform.

Prior to the official announcement of the 1984 urban reform, Shashi was designated as the first pilot city to carry out pilot economic structural reforms in July 1981. Since 1981, 74 cities such as Chongqing, Wuhan, Shengyang, Dalian, and Nanjing were approved to be pilot cities for economic reforms. Twenty of them experimented institutional reform, 27 banking reform, 14 housing system reform, and 13 market responded production reform (State

Statistical Bureau, 1990). Urban reform has freed the cities from the reliance on central government investment and moved them to be more towards the market economy. It has changed the source of investment and employment structure of the city as well as the control over population movement. The household registration system is no longer effective in restricting non-registered people in the city. They can bypass the household registration in getting employment and their daily necessities from the free market.

## **SPATIAL STRATEGY IN NATIONAL DEVELOPMENT**

There is a strong spatial emphasis in economic development in the post-1978 era. The emphasis is on the coastal region, particularly cities in the coastal region. It is hoped that they will develop first and development could be spread to other cities and other regions.

Export and foreign investment are considered to be important generators of economic development. In addition to the legal and economic reforms to ease the way for foreign investment in China, a number of geographical areas have been designated as focal points in attracting such investment since 1978. While it is too simplistic to identify a few growth areas in a country that is witnessing such widespread development, it is helpful to examine three main types of areas - SEZs, open coastal cities, and other areas designated to attract foreign investment.

### **Special Economic Zones (SEZs)**

SEZs were the first areas to be designated to attract foreign investment. Four were initially established in 1979, in Shenzhen, Zhuhai, Xiamen and Shantou (Figure 7-1). Hainan island was added as the fifth SEZ in April 1988. The SEZs represented a major initial attempt to attract foreign capital, investment, enterprise, and technology, which would be located in "controlled environments", strictly demarcated zones where experiments with new economic policies in dealing with foreign investments can be conducted (Jao and Leung, 1986). They are similar in some ways to export-processing zones elsewhere in the Third World, where an export-oriented industrialization strategy is facilitated by providing legislative and tax concessions, infrastructure and serviced sites. China's SEZs offer a similar range of financial, legal and infrastructural inducements to foreign investors, including tax holidays, easy remittance of profits, and prepared sites with services and buildings. They also offer labour savings compared with many other countries in Southeast Asia plus, importantly, simplified bureaucratic procedures for

investment, customs, and immigration.

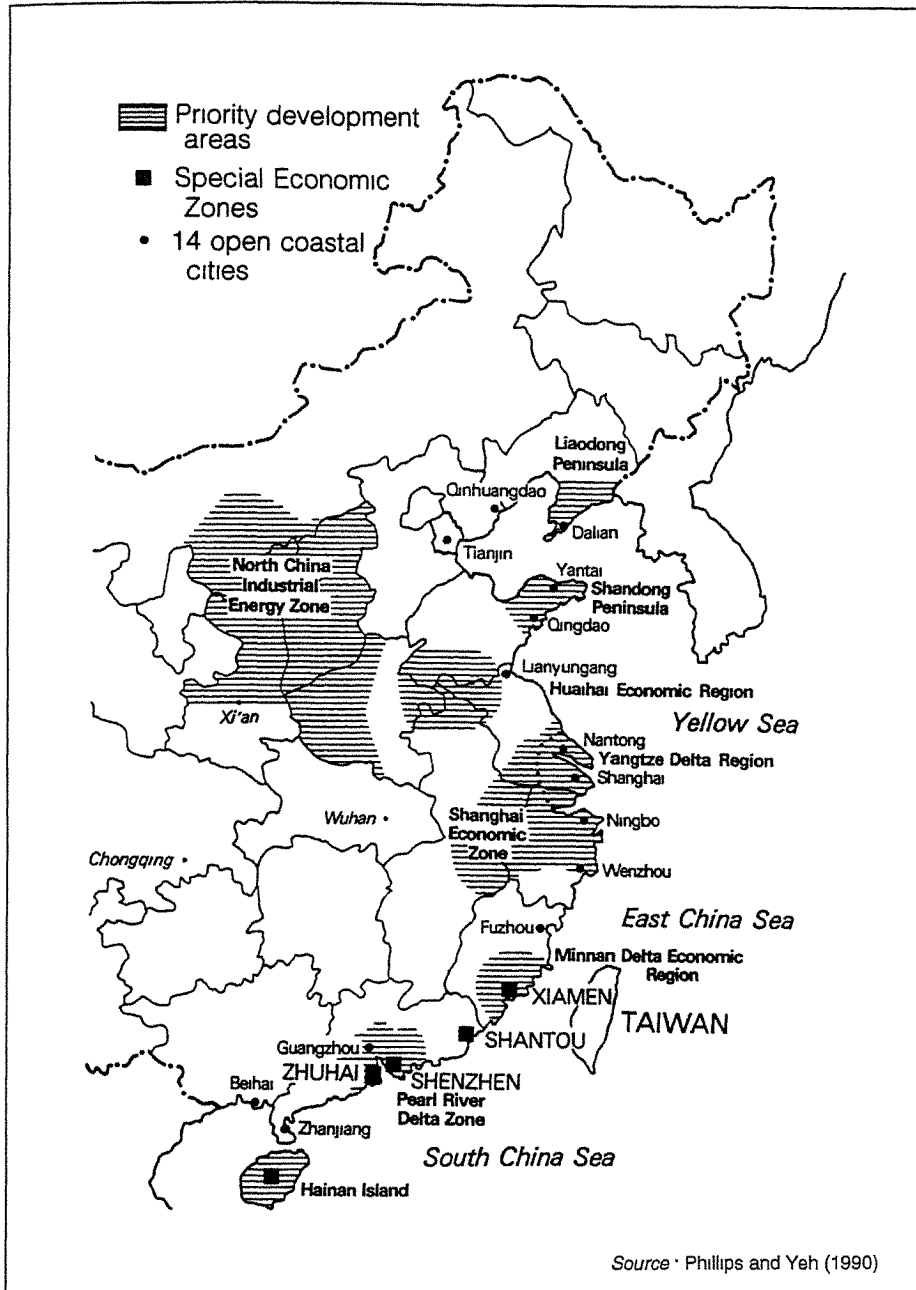
China's SEZs are a particular type of export-processing zone (EPZ). The SEZs had the initial objective of manufacturing goods for export to earn foreign exchange but, very importantly, they have been regarded as social and economic laboratories, in which foreign technological and managerial skills might be observed and adopted, albeit selectively. They have had mixed success. For example, they export more of their products into China than overseas. They have sometimes acquired dated, rather than the latest technology. It is also estimated that 40 percent of foreign investment is not in manufacturing but in tourism or commercial projects.

The SEZs have, nevertheless, grown into important economic entities, somewhat physically and economically cut off from the rest of China. They have developed mixed economies, including vast retail, commercial, and tourist capacity as well as manufacturing.

### **Open Coastal Cities**

During 1984 and 1985, in spite of some criticisms, the SEZs were being acclaimed by many as examples of what other Chinese cities could achieve. In Spring 1984, fourteen other coastal ports were opened for investment (Yeung and Hu, 1992). The fourteen coastal cities are Dalian, Qinhuangdao, Tianjin, Yantai, Qingdao, Lianyungang, Nantong, Shanghai, Ningbo, Wenzhou, Fuzhou, Guangzhou, Zhangjiang, and Beihai (Figure 7-1). These "open cities" were to offer similar concessions to foreign investments as the SEZs, although they are not provided with the same level of central government funding for infrastructure development. Economic and Technical Development Zones (ETDZ) will be established in them to attract foreign investment. However, in June 1985, Deng Xiaoping started to voice misgivings about the SEZs and open cities, and it was announced that foreign investment was to be channelled into four of the biggest coastal cities - Shanghai, Tianjin, Dalian, and Guangzhou - rather than all fourteen. They would grow in advance of the other ten, which would still be favoured but which, realistically, could not be on par with the speed of the four main cities. Despite the official policy, local administrators have continued to promote their cities' "openness" in spite of central priorities.

**Figure 7-1 Special Economic Zones, Coastal Open Cities and Open Economic Regions of China**



The importance of cities in the development strategy is further emphasized in 1990 by the declaration of Pudong in Shanghai to be a special development area. It is hoped that the development of Pudong is can foster the development of the Changjiang (Yangtze River) area, including Jiangsu and Zhejiang provinces. Apart from being significant to Shanghai, Pudong is also of national strategic importance.

### **Other Areas Favoured for Foreign Investment**

A number of other types of areas are also keen to attract foreign investment, with or without special inducements.

#### ***A. The Delta Regions***

Some broad areas are being favoured because of their accessibility and other reasons for foreign investment. Often, this involves development around an SEZ or a port city in recognition of the spin-offs and enlarged markets offered by such zones. In 1985, three "open" economic regions were designated - Yangtze River (Changjiang) Delta Economic Region (centred around Shanghai), the Pearl River (Zhujiang) Delta Economic Region (centred around Guangzhou), and the Minnan Delta Economic Region (around Xiamen). These are considered to have relatively advanced economic development and communication systems, and good tertiary education institutions. Such opening seem to be an attempt to spread benefits from the SEZs or ports to their surrounding parts.

#### ***B. Other Special Areas***

Some cities such as Guangzhou, Chongqing, Wuhan, Xian and Dalian have been given the right to cut a considerable amount of bureaucracy in getting their economic plans approved directly by the State Council. This means faster and surer approval of schemes and indicates greater commitment on the part of local officials to economic development and trade.

Other zones were designated for foreign investment. Some of these zones are based on natural resources, others on the existing volume of industry and economic activity. Examples of these are North China Energy Base Economic Region and the East China Economic Region (Philips and Yeh, 1990).

The spatial development strategy of China is to develop the coastal provinces first and then to develop the interior provinces. With the success of the SEZs and the coastal open cities, development is now towards the



river ports along major rivers, such as Wuhu, Jiujiang, Wuhan, Yueyang, and Yichang. Special development areas are also designated at the border, for example, the Tumenjiang development supported by the United Nations Development Programme (UNDP) at the border of China, North Korea, and Russia.

Although foreigners can now invest in most provinces, the designation of the SEZs, open coastal cities, and open economic regions has indicated the priority attached by the government to attract foreign investment to these areas rather than elsewhere. The reasons seem obvious - agglomeration economies may develop; socio-political control of foreign involvement may be easier; and these areas have better infrastructure and links with the outside world, and ties with Hong Kong and Overseas Chinese in Southeast Asia. Most of the foreign capital has so far come from Asia, and particularly from Japan and Hong Kong (Table 7-1).

**Table 7-1 Major Foreign Investors in China, 1989**  
(those with total amount of more than US\$50 million)

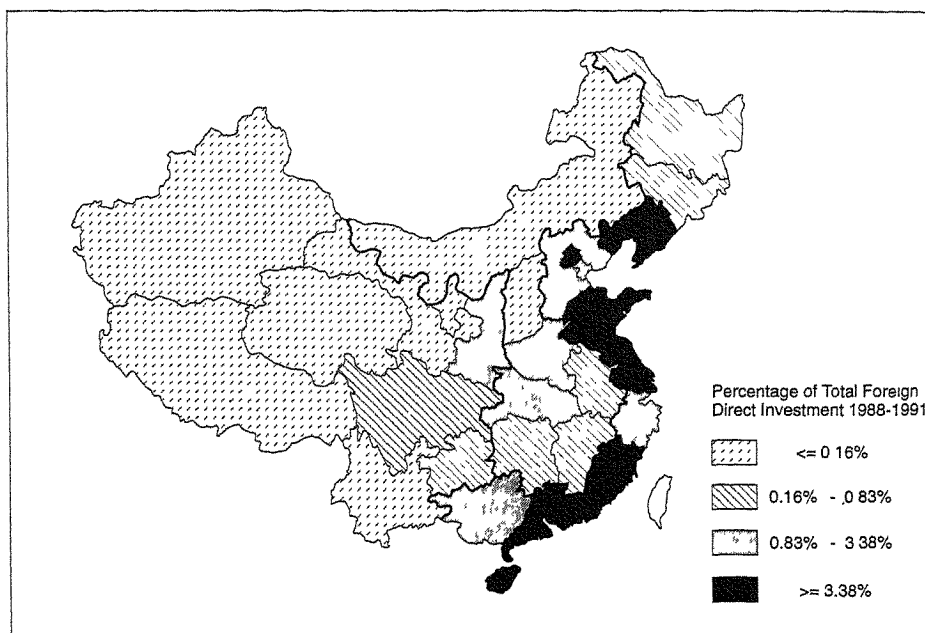
Country (Region) & International Financial Institutions	(in million US\$)					
	Total		Foreign Loans		Direct Foreign Investment	
Japan	2,951.3	30.5%	2,595.0	41.3%	356.3	10.5%
Hong Kong & Macau	2,648.7	27.4%	571.1	9.1%	2,077.6	61.2%
World Bank	1,026.8	10.6%	1,026.8	16.3%	0.0	0.0%
France	794.7	8.2%	790.1	12.6%	4.6	0.1%
U.S.A.	390.0	4.0%	105.7	1.7%	284.3	8.4%
Britain	374.0	3.9%	346.4	5.5%	28.5	0.8%
West Germany	234.2	2.4%	152.8	2.4%	81.4	2.4%
Italy	151.5	1.6%	121.2	1.9%	30.3	0.9%
Sweden	95.7	1.0%	92.4	1.5%	3.3	0.1%
Singapore	86.2	0.9%	2.0	0.0%	84.1	2.5%
Total	8,753.8	90.4%	5,803.4	92.3%	2,950.4	87.0%
GRAND TOTAL	9,678.3	100.0%	6,285.7	100.0%	3,392.6	100.0%

Source : *Almanac of China's Foreign Economic Relations and Trade*, 1990

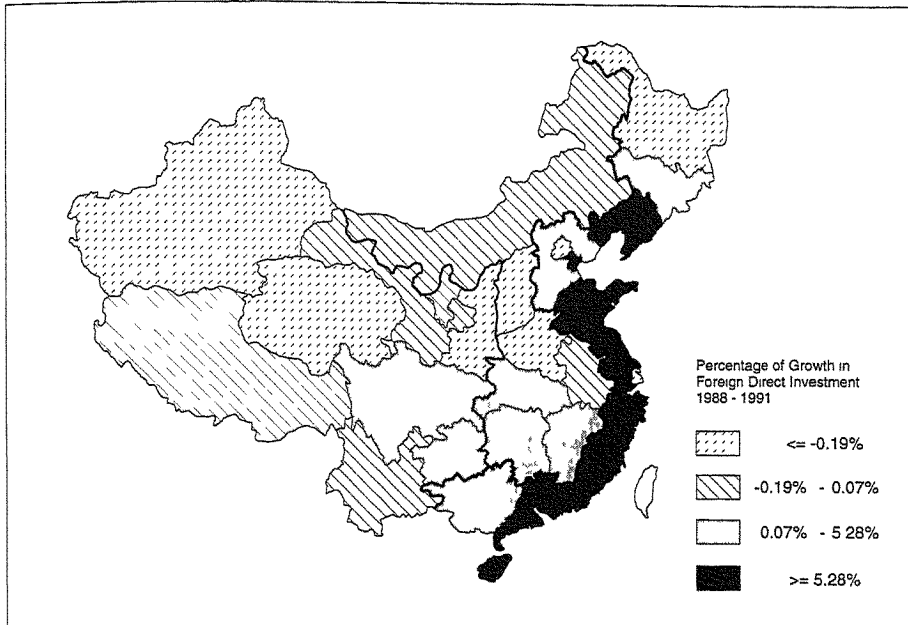
Investments are very unevenly distributed spatially. They are highly concentrated in the coastal provinces, particularly around large cities such as Beijing, Shanghai, and Guangzhou, and in the SEZs of Shenzhen and Xiamen (Figure 7-2) The growth of foreign direct investment is also mainly along the Eastern Coastal regions<sup>1</sup> (Figure 7-3). Although there are indications of a gradual diffusion of foreign investment into the interior provinces, the impact of foreign investment on most interior provinces to date has been small.

Capital from firms in Hong Kong and Macau is concentrated in the SEZs and nearby Guangdong and Fujian provinces. This is largely related to geographical proximity and ethnic ties which seem to play an important role in the locational decisions of foreign investors. Most of the investment from Southeast Asian investors (mainly overseas Chinese) is in Guangdong and Fujian provinces, and those involved seem particularly interested in investing in the districts from which they or their families originated. Their investments are particularly important in the SEZs and small towns in Guangdong and Fujian, and especially the Pearl River Delta. By contrast, 50 percent of North American and European investments are located in the large cities such as Beijing, Tianjin and Shanghai, where better urban and industrial facilities exist.

**Figure 7-2 Regional Distribution of Foreign Direct Investment in China, 1988-91**



**Figure 7-3 Regional Growth of Foreign Direct Investment in China, 1988-91**



Exports are also therefore highly concentrated in the coastal regions and particularly the main urban centres, where the level of industrialization is already high. Such regions and towns have a greater exposure to the West, and have more job opportunities in foreign joint enterprises which pay higher salaries than Chinese employers. Migration controls have become less stringent in recent years, but people in the interior still cannot easily move to the coastal provinces to enjoy such benefits. This will tend to increase regional disparities between coastal and interior provinces. In addition, continued urbanization and growth of large coastal cities will inevitably occur, fuelling the cumulative process of development of the eastern seaboard.

The designation of SEZs, cities, and regions along the coast for foreign investment is understandable because they are more accessible than interior cities and regions to foreign investments. The open coastal cities and the SEZs were also previous ports in which foreigners had lived and traded with China.

Since the adoption of the open door policy, some US\$27 billion of foreign capital has been utilized in the period 1979-85 (Phillips and Yeh, 1990). Of

this 72 percent has been in the form of external loans, whereas 27.8 percent has been direct investment. Hong Kong provided most of the direct foreign investment, followed by Japan and the US. Because of the policy of designating SEZs, coastal open cities, and open economic regions along the coast, foreign investments are unevenly distributed spatially. They are highly concentrated in the coastal provinces, particularly along large cities such as Beijing, Shanghai, and Guangzhou and the SEZs of Shenzhen and Xiamen (Phillips and Yeh, 1990).

## **URBANIZATION TREND IN CHINA**

The urban system of China consists of cities (*chengshi*) and towns (*zhen*). The designation of cities and towns is governed by the Ministry of Civil Affairs. The criteria of designation change at different time periods, reflecting the prevailing urbanization policy, economic development, and political ideologies. These criteria have much impact on the number and population of cities and towns in the urban system of China. The criteria of granting city and town statuses were very strict before 1978 but were much relaxed after 1978 to meet the demand for rapid economic development.

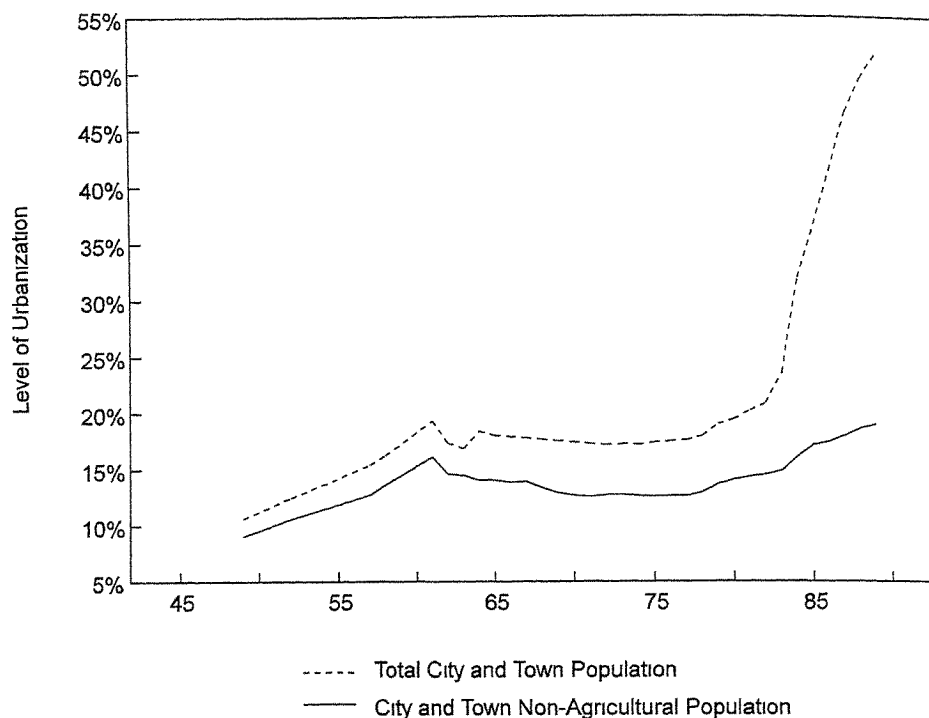
The definition of urban population is most problematic in China, particularly in 1983 when many counties were abolished and turned into cities and in 1984 when many townships were abolished and turned into towns (Chan and Xu, 1985; Ma and Cui, 1987). Urban population reported in the Statistical Yearbooks of China refers to the total agricultural and non-agricultural population within the administrative boundaries of the designated cities and towns, excluding the counties under the jurisdiction of the cities. This over inflated the urban population of China because many agricultural populations have been included in the boundaries of the towns and cities. If this is used for the estimation of urbanization level in China, the urbanization level of China will be increased from 17.9 percent in 1978 to an astonishing 51.7 percent in 1989 (Figure 7-4). Over 63 percent of the urban population in 1989 consisted of agricultural population who are not involved in urban activities. Non-agricultural urban population in city proper and towns is a better estimator for the urbanization level in China because it is less affected by changes in the boundaries of cities and towns and is more involved in urban activities (Ma and Cui, 1987).

Based on official statistics, there is a marked increase in the urbanization level of China since 1978 (Figure 7-4). However, the major increase in urbanization level is not due to the increase in rural-urban migration but mainly due to the increase in the designation of human settlements as cities

and town and the enlargement of the boundaries of cities and towns. In 1979, the "city leading county" (*shidaixian*) system was implemented. As a result, many counties were abolished and turned into cities without boundary and name changes and some counties were merged into cities. There was a relaxation of the criteria of establishing cities in 1983 and many counties and towns have been upgraded to cities (Yeh and Xu, 1990b). The number of cities has been increased from 194 in 1978 to 450 in 1989. In 1984, with the changes in the criteria in designating towns where townships seat are granted town status if its non-agricultural population exceeds 2,000, many townships (*xiang*) became towns. The number of towns increased dramatically from 2,781 in 1983 to 6,211 in 1984, adding 73.2 million population to the urban population. Of the 73.2 million population, 89.8 percent of them were agricultural population. Because of the inclusion of large amount of agricultural population in its definition (Figure 7-5), urban population in China is often considered to be over-inflated (Chan and Xu, 1985; Ma and Cui, 1987). Over 63 percent of the urban population in 1989 consisted of agricultural population who were not involved in urban activities. Non-agricultural urban population which consists of the non-agricultural population of city proper and towns is a better estimate for actual urban population in China. Based on the non-agricultural urban population, urbanization level of China has increased from 12.9% in 1978 to 19.0% in 1989 (Figure 7-4). This is a much lower but more realistic estimate of urbanization level in China than the estimate based on total urban population which is 51% in 1989 (Figure 7-4). Although there is an increase in urbanization, the level of urbanization is still low compared to the developed countries which are normally over 70%.

The regional distribution of the urbanization level is still similar to that prior to the adoption of economic reforms and the open door policy. Most of the relatively highly urbanized provinces are located at the western and northern parts of China, such as Xinjiang, Xizang, Inner Mongolia, Liaoning, Jilin and Heilongjiang (Figure 7-6). This is because provincial variation of urbanization level in China is positively related to per capita economic output, industrialization level and land area, and negatively related to population density (Yeh and Xu, 1984). Most of the coastal provinces have high population density and small land area and therefore do not have high urbanization level. The open door policy has some effects on the increase in urbanization level of the coastal provinces. In 1985-90, provinces with great increase in urbanization level are mainly found along the coast or near to the coast, such as Guangdong, Anhui, Henan and Shandong (Figure 7-7). If this trend continues, it will change the pattern of regional distribution of

**Figure 7-4 Urbanization of China 1949-89**



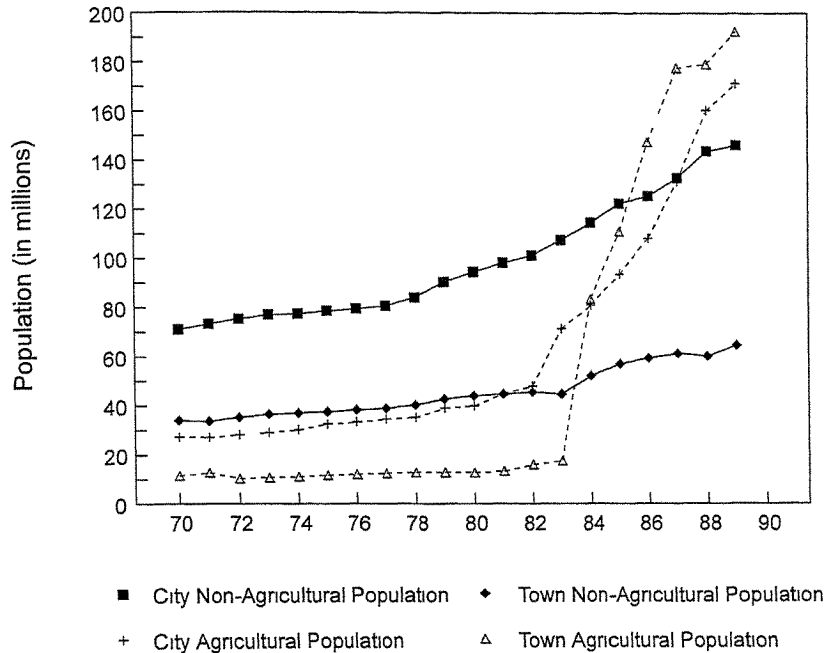
Sources : *China Population Statistical Yearbooks and China Statistical Yearbooks*

urbanization level in China, with the coastal provinces to be increasingly more urbanized.

### City System

The most spectacular impact of the post-1978 era was the increase in the number of cities. There was a more relaxing attitude towards the establishment of cities. The granting of city status was also used as a mechanism to facilitate local authorities in attracting foreign investment. As a result, the total number of cities rapidly jumped from 194 in 1978 to 467 in 1990 and the city population (non-agriculture population in city proper) soared from 84.1 million in 1978 to 150.38 million in 1990. A relatively large number of small and medium-sized cities were added to the city system<sup>2</sup>.

Figure 7-5 Composition of City and Town Population 1970-89



Sources : *China Population Statistical Yearbooks and China Statistical Yearbooks*

As a result, there is a decline in the proportion of large cities and an increase in the proportion of small cities (Figure 7-8) (Yeh and Xu, 1990a).

The open door policy has reversed the previously much emphasized city and economic development in the Western and Central regions. As a result, the trend of decentralization to Western and Central provinces was reverted after 1978, with new cities and population added to the Eastern Coastal region (Yeh and Xu, 1990b).

Unlike Western countries where cities play an important role in its economy, the contribution of cities in the economy of China is less significant because of its large rural population. In 1990, they only contribute 35.0 percent of the total gross national product. However, cities still play an important role as manufacturing centres and major foci for attracting foreign direct investment. They contribute to over 80 percent of the total light and heavy industry outputs and 69.9 percent of the total foreign direct investment. They also contain a large majority of state and

Figure 7-6 Regional Variation of Urbanization Level in China, 1990

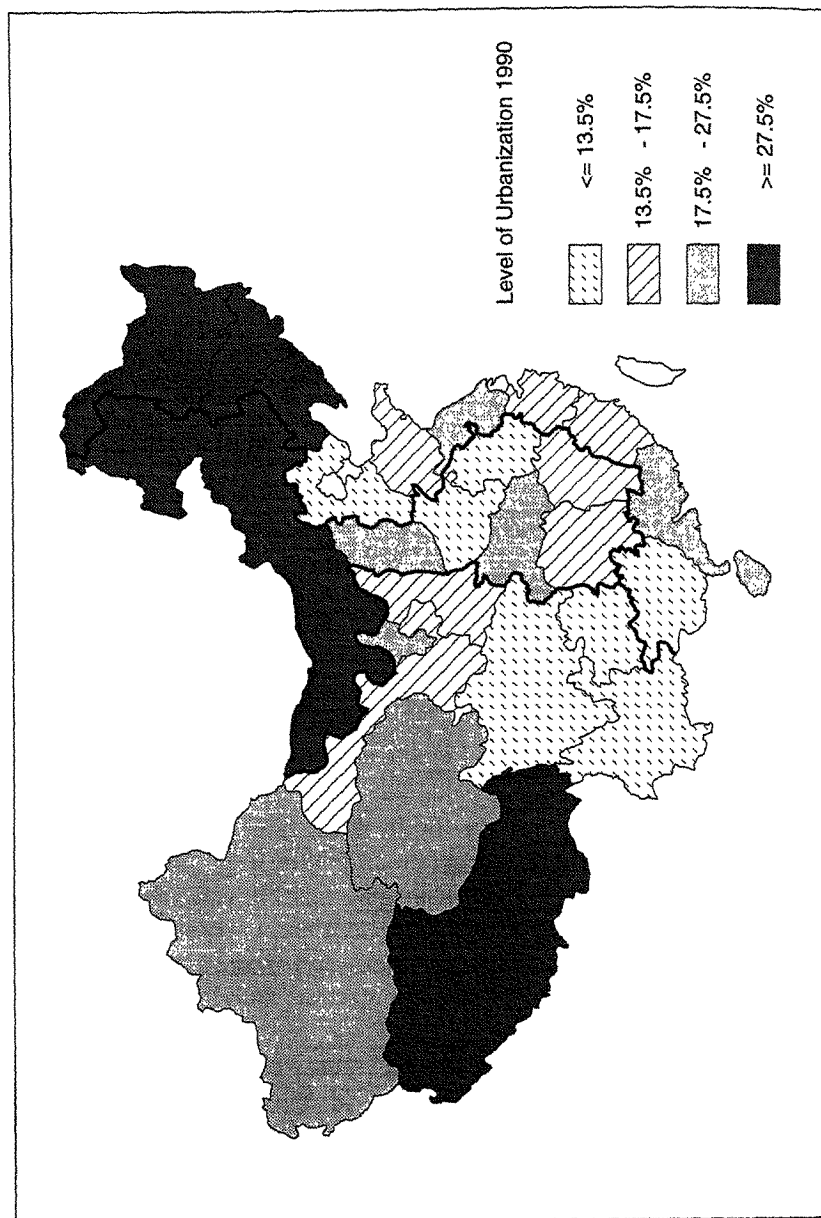
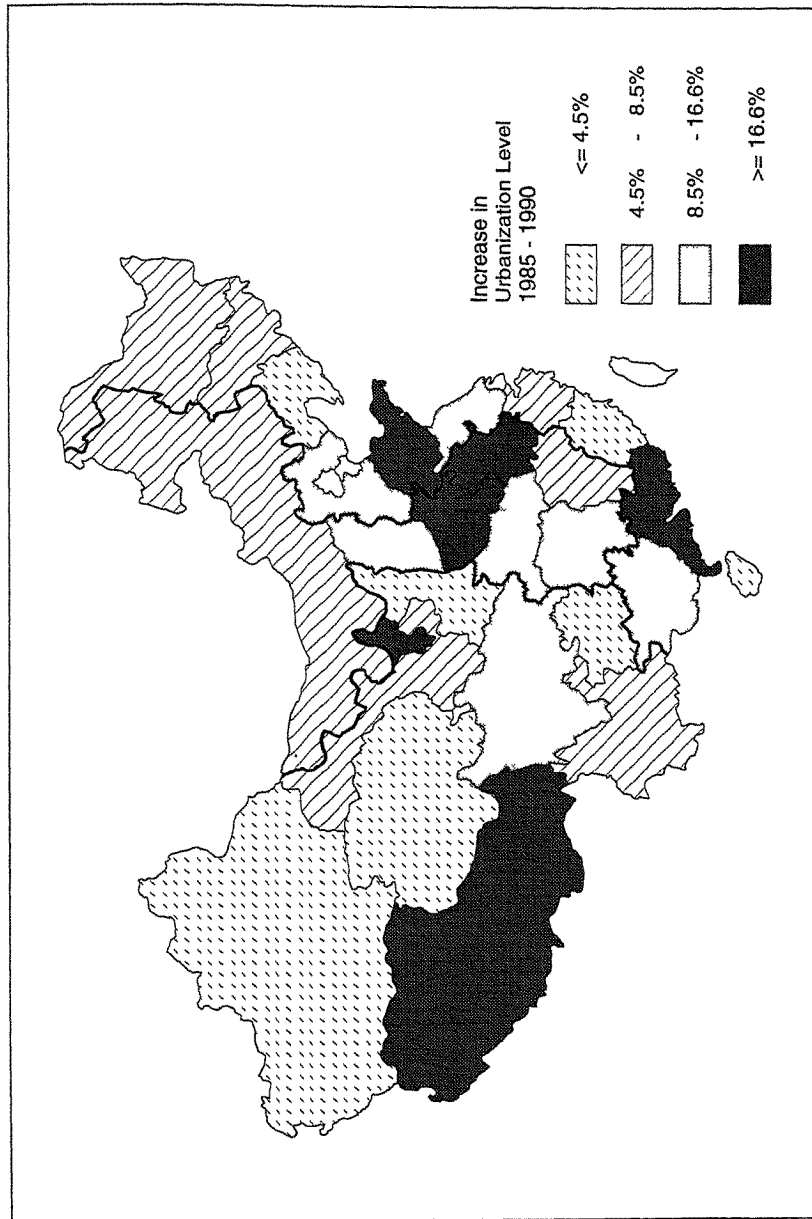
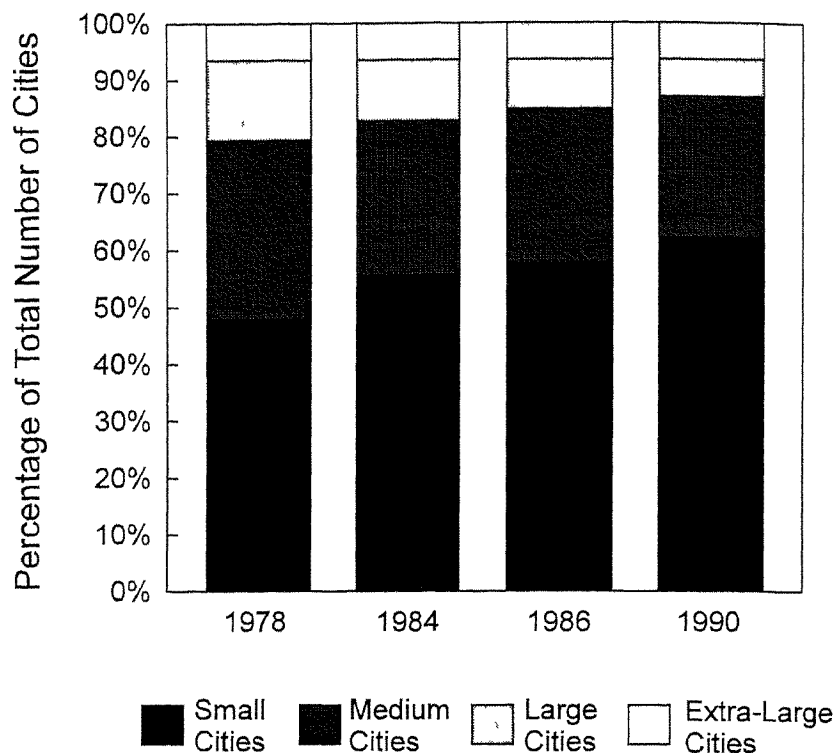




Figure 7-7 Regional Variation of Increase in Urbanization Level in China, 1985-90



**Figure 7-8 Changes in City Size Distribution, 1978-90**



collective enterprise workers and a high proportion workers (85.2 percent) in enterprises outside the state and collective enterprise system.

**Rural Urbanization**

The new rural policies, which introduced the "responsibility system" have increased productivity by giving incentives to those who work hard. Farmers can sell their surplus products at the free market after fulfilling the contracted quota. Along with the increase in productivity of farming is the tremendous growth of rural commercial and manufacturing activities and the revival of market towns. Rural industries are a significant source of income and employment opportunities for peasants (Chang and Kwok, 1990). It employs a growing number of rural surplus labour. It produces goods and services to the rural economy and a steady demand for raw materials. Rural savings are reinvested in rural enterprises. With free markets and rural

industrialization, there is a rapid growth of small towns in China. Rural urbanization was praised by Fei (1984) as the solution of China's rural surplus labour problem by allowing them to leave their farmland without leaving their villages (*litu bulixiang*). Rural urbanization was phenomenal in China. There is a rapid increase in the number of towns. They increased from 2,176 in 1978 to 11,481 in 1988. In some growing regions, such as the Pearl River Delta, small towns are growing faster than the cities, reverting the urbanization trend of most developing countries where cities are growing faster than towns (Xu and Li, 1990). Rural urbanization is highly concentrated in the Eastern Coastal region (Zhou, 1991).

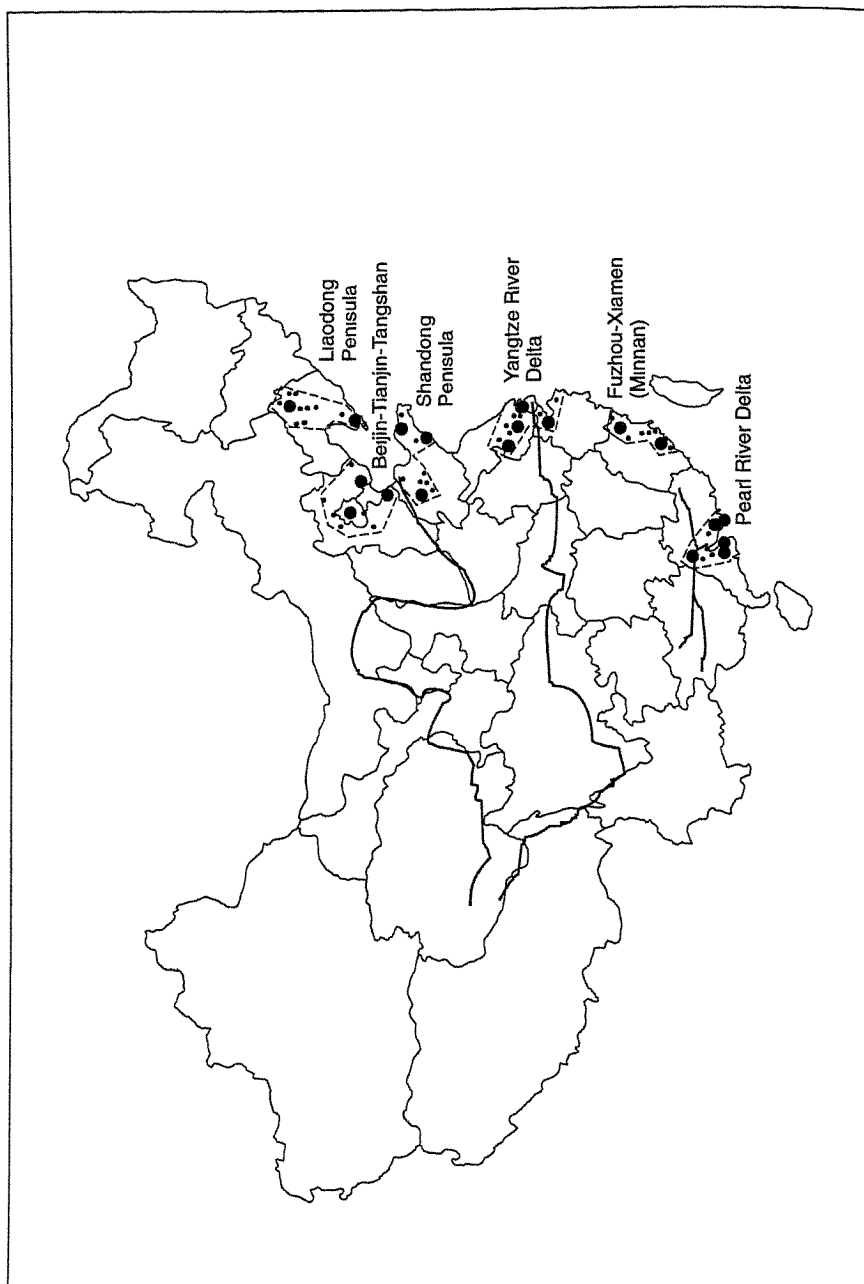
### **Urban Clusters**

For some more prosperous areas, such as the Pearl River (Zhujiang) Delta and the Yangtze River (Changjiang) Delta, economic reforms and the open door policy have reinforced the development of the previously established urban clusters. Some new urban clusters are emerging (Zhou, 1991; Yao et al., 1992) (Figure 7-9). These areas have high level of urbanization with the involvement of rural labour in non-agricultural activities

Clustering of cities and towns long existed in China (Yeh and Xu, 1984). They existed even in the Imperial Period (Skinner, 1977). They were located in the plains, deltas and industrial districts in China. The four main urban clusters are :

- 1) *Liaodong Peninsula (Shenyang-Dalian)*, centring around Shenyang and Anshan. The Shenyang-Dalian region takes Shenyang on the northern end, and Dalian as the southern end. Shenyang is the major industrial town of China and Dalian is the major port. Cities in the region includes Anshan and Fushun, Benxi and Liaoyang. They are connected by railway and expressway and are dominated by heavy industry.
- 2) *Beijing-Tianjin-Tangshan*, focusing on Beijing. Beijing and Tianjin are the dominant cities of this cluster. Other important cities of the region include Tanggu and Tangshan. Beijing, Tianjin and Tangshan are linked by the Beijing-Shenyang railway.
- 3) *Yangtze River (Changjiang) Delta (Nanjing-Shanghai-Hangzhou)*, centring around Shanghai. Shanghai is the dominant cities of this clusters with Nanjing and Hangzhou as the supporting cities. Cities within these clusters include Wuzi, Suzhou, Changzhou, Ningbo and Nantong. The Nanjing-Shanghai-Hangzhou-Ningbo railway, the Grand Canal, and the Yangtze River are the major transportation network linking these cities.

Figure 7-9 Urban Clusters in China



With the development of the Pudong new district in Shanghai, there will be much development in this urban cluster in the near future.

- 4) *Pearl River (Zhujiang) Delta*, centring around Hong Kong and Guangzhou. Guangzhou and Hong Kong are the main cities in this region. The Guangzhou-Kowloon railway, the Pearl River channel, and the Shenzhen-Guangzhou expressway that is under construction are the major transportation links. Because of its proximity to Hong Kong, the Pearl River Delta region has become the region where both market and openness to the outside world are most advanced in China. It has the two fastest growing SEZs in China. Its economic development has been regarded as one step ahead of the rest of China (Vogel, 1989). Investment from Hong Kong have strongly stimulated the manufacturing, tourist, and retailing in the region. Township enterprises are prospects. There are many temporary workers from other parts of Guangdong and from other provinces such as Sichuan, Hunan, and Guangxi provinces.

These clusters are either deltas or plains with abundant natural resources and a long history of development. They have a high density of population and abundant agricultural or industrial production. The last three clusters are China's important agricultural and commercial centres. The capital region and south Liaoning clusters are China's major producing areas of coal, iron, and also China's metal, machinery, petrochemical and industrial centres.

These urban clusters boom in the economic reform and open door policy period because they are located along the coast and are more accessible to the world. Apart from the further development of the existing cities, new cities began to emerge within these clusters. For example, Dongguan, Shenzhen, and Zhuhai in the Pearl River Delta, and Changzhou in the Yangtze River Delta.

Economic reforms and the open door policy also lead to the emergence of new urban clusters of cities. Two clusters have great potential of further development. They are Shangdong peninsula, centring around Qingdao, and Fuzhou-Xiamen (Minnan), centring Xiamen and Fuzhou. Foreign-oriented economy and local manufacturing industries are developing rapidly in these clusters.

## **EFFECTS OF ECONOMIC REFORMS AND OPEN DOOR POLICY ON URBAN SYSTEM DEVELOPMENT IN CHINA**

The open door policy has changed the economic structure of the cities in China. More people are working in the tertiary sector and in non-state enterprises. With a rising living standard and a need for a better network to sell the products of reformed enterprises, the tertiary sector is growing rapidly. In the 74 main surveyed cities by the State Statistical Bureau, the percentage of the tertiary sector in the city's GNP increased from 19.1 percent in 1978 to 32.6 percent in 1988. Employment in the tertiary sector increased from 24.2 percent to 33.9 percent. Changes in the economic structure of the cities are faster in the SEZs where free markets work more better than other cities. In 1989, 45.9 percent of the labour force was employed in the tertiary sector as compared to 31.6 percent in the 74 economic reform cities and 36.7 percent in the coastal open cities.

Despite the existence of non-state enterprises, the majority of the people in the cities still work in the state enterprises. There is only a slight increase in the percentage of people employed by other forms of employment, such as individual enterprises and enterprises with foreign investments. There is a large variation among cities with different degrees of economic reform. There is a much higher percentage of people working in non-state enterprises, particularly individual enterprises and enterprises with foreign investments, in the SEZs than other types of cities (Table 7-2). Some 29.8 percent of the workers in the SEZs are employed by non-state and non-collective industrial enterprises and 18.9 percent by non-industrial establishments. In contrast, only around 2.9 percent and 2.0 percent respectively of the workers in the coastal open cities are so employed, already higher than the other reform cities. This is mainly the result of the degree of economic reform and the utilization of foreign investment among these cities, with more economic reforms and foreign investments in the SEZs.

The open door policy has led to a concentration of foreign investment in the Eastern Coastal region. SEZs and open coastal cities are benefiting more from the open door policy than inland cities and have higher economic growth rates (Leung, 1990; Xie and Coasta, 1991; Fan, 1992). The distribution of foreign investment is mainly concentrated in the extra-large cities and in the Eastern Coastal region (Table 7-3). Quite a sizeable amount of foreign investment is also located in the medium-sized cities in the Eastern Coastal region. There is a high concentration of foreign investment in the Eastern Coastal region and extra-large cities (Tables 7-4 and 7-5). However, as reflected by the coefficient of variation, there is very high variation in

**Table 7-2** Types of Employment in City Proper in Economic Reform Cities, Coastal Open Cities and Special Economic Zones, 1989

Types of Cities	Non-Industrial Establishments			Industrial Establishments		
	State	Collective	Others	State	Collective	Others
74 Economic Reform Cities	71.9%	26.7%	1.4%	67.0%	30.8%	2.2%
14 Coastal Open Cities	73.9%	24.1%	2.0%	67.4%	28.7%	2.9%
4 Special Economic Zones	55.3%	25.8%	18.9%	37.1%	33.1%	29.8%

Source : *China Urban Statistical Yearbook 1990*, pp. 593, 603.

different regions and city sizes. FDI tends to concentrate in the coastal regions and large cities. For most regions and city sizes, the coefficient of variation is higher than 300 percent. The variation in foreign investment was very high for small, medium-sized, and large cities. But, the variation is relative small in extra-large cities, indicating that most extra-large cities have high foreign investment and less variation. The high concentration of foreign investment can be shown in Table 7-6. In 1990, the top twenty cities in foreign investment accounted for 78.3 percent of the total FDI in cities. All these cities are coastal cities in the Eastern Coastal region. Most of them are located in the Guangdong province which is adjacent to Hong Kong, the major source of foreign investment in China.

There is a difference in the source of FDI between northern coastal cities and southern coastal cities. Take Shenzhen and Shanghai, for example. The source of investment in Shenzhen is mainly from Asian countries, particularly Hong Kong, whereas Asian FDI is less prominent in Shanghai (Table 7-7). In the period 1985-89, 93.0 percent of the FDI in Shenzhen came from Asia, with 85.0 percent from Hong Kong. In Shanghai, only 52.0 percent of the FDI was from Asia and 30.5 percent was from non-Asian countries. Although Hong Kong was still the largest investor, it only constituted 34.7 percent of its FDI. Japan and the US are more important in Shanghai than in Shenzhen. The

Table 7-3 Average Foreign Direct Investment by City Size and Region, 1988 and 1990

City Size	Foreign Direct Investment (in US \$1,000)	Western Region		Central Region		Eastern Coastal Region		TOTAL	
		1988	1990	1988	1990	1988	1990	1988	1990
Small Cities	Average	84	5	88	140	1,785	3,531	776	1,756
	Difference in 1988 and 1990 Average		-79		52		1,746		800
Medium-Sized Cities	Average	8	286	1,606	600	10,347	13,871	608	7,700
	Difference in 1988 and 1990 Average		278		-1,001		3,524		7,092
Large Cities	Average	0	0	122	2,424	4,966	10,058	3,666	7,790
	Difference in 1988 and 1990 Average		0		2,302		5,092		4,124
Extra-Large Cities	Average	11,973	3,879	3,386	4,416	38,268	44,370	26,405	28,782
	Difference in 1988 and 1990 Average		-8,094		-1,030		6,102		2,377
TOTAL	Average	852	347	587	512	7,588	10,364	3,965	5,289
	Difference in 1988 and 1990 Average		-505		75		2,776		1,324

Source : China Urban Statistical Yearbook (1989 and 1991)



**Table 7-4 Foreign Direct Investment in Cities (in US \$1,000) by Region, 1990**

Region	Total	Percentage	Mean	Standard Deviation	Coefficient of Variation	No. of Cities
Eastern	2,362,930	95.7	10,363	34,982	337.6%	228
Central	74,780	3.0	512	1,608	314.1%	146
Western	32,350	1.3	347	1,291	372.0%	93
TOTAL	2,470,060	100.0%	5,289	24,937	471.5%	467

Source: *China Urban Statistical Yearbook* (1991)

**Table 7-5 Foreign Direct Investment in Cities (in US \$1,000) by City Size, 1990**

City Size	Total	Percentage	Mean	Standard Deviation	Coefficient of Variation	No. of Cities
Small	458,750	18.6	1,576	9,762	619.4%	291
Medium	900,930	36.5	7,700	35,589	462.2%	117
Large	218,120	8.8	7,790	19,073	244.8%	28
Extra-Large	892,260	36.1	28,782	52,735	183.2%	31
TOTAL	2,470,060	100.0%	5,289	24,937	471.5%	467

Source : *China Urban Statistical Yearbook* (1991)

**Table 7-6 Top Twenty Cities in Foreign Direct Investment, 1990**

City	Province	City Size	Foreign Direct Investment (in US\$1,000)
Shenzhen	Guangdong	Medium	349,200
Dalian	Liaoning	Extra-Large	200,750
Shanghai	Shanghai	Extra-Large	177,190
Huizhou	Guangdong	Small	146,230
Guangzhou	Guangdong	Extra-Large	117,010
Beijing	Beijing	Extra-Large	105,760
Dongguan	Guangdong	Medium	100,100
Tianjin	Tianjin	Extra-Large	83,150
Shantou	Guangdong	Large	81,970
Foshan	Guangdong	Medium	79,230
Haikou	Hainan	Medium	73,880
Xiamen	Fujian	Medium	72,730
Fuzhou	Fujian	Large	65,100
Zhuhai	Guangdong	Small	62,190
Nanjing	Jiangsu	Extra-Large	57,350
Zhongshan	Guangdong	Medium	53,280
Qingdao	Shandong	Extra-Large	30,960
Jiangmen	Guangdong	Medium	28,340
Shenyang	Liaoning	Extra-Large	27,470
Putian	Fujian	Small	22,720
FDI in the Top Twenty Cities			1,934,610
Total FDI in all the Cities of China			2,470,060
% of Total FDI in Top Twenty Cities			78.32%
* Cities in Guangdong Province			
Total FDI in Guangdong Cities Among the Top Twenty Cities			1,017,550
% of Guangdong Cities in Total FDI of the Top Twenty Cities			52.59%
% of Guangdong Cities in Total FDI of the Cities in China			41.19%

Source : *China Urban Statistical Yearbook* (1991)

**Table 7-7 Distribution of the Source of Foreign Direct Investment in Shenzhen and Shanghai, 1985-89**

	Shenzhen	Guangdong	Shanghai	National
Hong Kong	85.0%	87.2%	34.7%	61.5%
Japan	5.6%	3.2%	12.6%	12.7%
Taiwan	1.0%	0.7%	0.0%	0.0%
Singapore	1.2%	0.9%	5.4%	1.2%
Thailand	0.3%	0.2%	0.0%	0.4%
Korea	0.0%	0.0%	0.0%	0.0%
Phillipines	0.0%	0.0%	0.0%	0.1%
<i>Total Main Asian Countries</i>	93.0%	92.3%	52.7%	75.9%
U.S.A.	6.0%	4.0%	23.7%	11.2%
Canada	0.3%	0.4%	2.5%	0.3%
United Kingdom	0.1%	0.1%	2.4%	1.3%
France	0.0%	0.2%	0.0%	0.9%
Germany	0.2%	0.1%	1.6%	1.1%
Sweden	0.0%	0.0%	0.0%	0.1%
Denmark	0.0%	0.0%	0.0%	0.3%
Australia	0.2%	0.8%	0.4%	1.1%
<i>Total Main Non-Asian Countries</i>	6.9%	5.6%	30.5%	16.4%
Other Countries :	0.1%	2.1%	16.8%	7.7%
<b>TOTAL</b>	100.0%	100.0%	100.0%	100.0%
<b>TOTAL (in million US\$)</b>	\$1,332.3	\$3,840.2	\$1,328.2	\$13,099.7
<b>% of National Total</b>	10.2%	29.3%	10.2%	

Sources : *Shenzhen Statistical Yearbooks*  
*Guangdong Statistical Yearbooks*  
*Shanghai Statistical Yearbooks*  
*Alamanac of China's Foreign Economic Relations and Trade*

pattern of foreign investment is different too. Most of the foreign investment in industries in Shenzhen is small. Foreign investment in Shanghai tends to be large. This is mainly because of the nature of foreign investment from Hong Kong. Foreign investment from Hong Kong is mainly related to outward processing of small industries from Hong Kong. It tends to involve many investors with small capitals, utilizing the cheap labour and land in Shenzhen.

Countries of origin of foreign investment have different impacts on the urban system. Foreign investment from Hong Kong is mainly located in the Southern provinces, particularly the Pearl River Delta. They are increasingly located in rural townships, contributing to the rapid rural urbanization of the Pearl River Delta. In contrast, most of the foreign investment from Japan and other countries are located in cities and less in rural areas. However, because of the development of export industries, many towns and cities are producing goods which are exported to different parts of the world.

## **CONCLUSION**

The importance of cities in national development has been re-emphasized after a period of anti-urbanism in the Cultural Revolution (Ma, 1976). Cities, especially those along the coast, rivers, and borders are considered as growth poles of development. They are developing rapidly in the post-1978 economic reform and open door policy era. In the coastal provinces, rapid development is not confined to large cities but is occurring in small cities and towns too, especially in the fast growing Jiangsu, Zhejiang, and Guangdong provinces.

The open door policy, particularly the introduction of foreign investment, commercial economy, and private enterprises, has much influence on urban system development in China since 1978. It has weakened the pre-1978's mechanisms of population control and state resource allocation that was effective in shaping urban system development to a form desired by the government. The household registration system has been relaxed and there is increasing mobility of people. The development of a free market and the proliferation of individual enterprises outside the state system are rapidly eroding the household system which was effective in controlling population growth in the cities. The state is less relied on in providing employment and services. People can earn more outside the state system in private enterprises and enterprises involving foreign investment. The Chinese government may no longer effectively control urban development. Kwok (1988) observed that large cities were developing more rapidly than the government policy of "control growth of large cities, rational development of medium-sized cities, and active

development of small cities". There have been rapid changes in the urban system due to economic reform.

The past decade of rapid development of the economy and the urban system is the interactive effect of economic reforms and the open door policy. Because of the locational advantage of the Eastern Coastal region, the open door policy has made it to grow faster than the Central and Western regions. Urban growth and urbanization, especially rural urbanization, is also most rapid in the Eastern Coastal region. With continued economic development in the Eastern Coastal region as a result of the open door policy, more towns in the Eastern Coastal region would be upgraded to become new cities in the future, reversing the pre-1978 trend of decentralizing cities to the Central and Western regions. Unless there is a major shift of the existing policy, there will be an upsurge of new cities in the Eastern Coastal region because the majority of the rapidly growing towns are located there, such as the towns in Guangdong and Jiangsu. Furthermore, some towns located in these provinces such as Dongguan have already been granted city status to have more autonomy and flexibility in attracting foreign investment. Apart from the addition of new cities, the open door policy also favours the development of existing cities in the Eastern Coastal region which have better accessibility and economic base for foreign investment. The recent designation of Pudong in Shanghai as a special development area is an example of this trend. If Pudong development is successful, it may be a model of development of other existing cities. The SEZs and open coastal cities have benefited more from the open door policy than inland cities.

The open door policy has opened the highly central controlled economy to a mixture of central and market economy. There are increasingly more people who do not rely on the state for income and housing. The pre-1978's mechanisms of population control and state resource allocation that were effective in controlling urban development is becoming less effective. One of the main manifestations of the weakening of central government in shaping urban development is the marked increase in temporary population in the cities. Temporary population in the cities is a major problem for the cities in China. In general, the level of urbanization in China is related to its level of industrial development. Although there is some temporary population in the cities, pseudo-urbanization where urbanization is unrelated to industrialization but the mere growth of urban population through rural-urban migration has not occurred in China yet. However, with further development of the free economy and if industrial development cannot catch up with urban population growth, pseudo-urbanization may occur in China. The massive rural-urban migration that has plagued many large cities in less developed countries may

appear in China, repeating some of the urban problems experienced by large cities in Asia.

China is in the midst of economic reforms. It is uncertain how much more free market mechanism is allowed to operate in the future. The existing form of free market demonstrates that there is an urgent need to improve urban management. In the past, urban development to a large extent could be controlled by the state through allocation of funding. With the free market, city government has less control over the location and timing of development. Without good urban management, the land use pattern can be chaotic, leading to inefficient use of the land and traffic congestion. There is an urgent need to manage the fast growing towns and cities in the Eastern Coastal region, otherwise their living environment and traffic conditions will deteriorate. Urban management is particularly needed in small towns where they are growing rapidly but with little planning and control. Environmental degradation of towns will be a serious issue if they are left unattended. There is an urgent need to train professionals such as planners and public administrators to plan and manage these towns and cities.

There may be a need to review the appropriateness of the national urban policy of "control the growth of large cities, rational development of medium-sized cities, and active development of small cities" for guiding city size development. There has been a weak relationship between city size and economic efficiency (Zhou, 1988). Economic efficiency of cities does not depend on city size alone but more on the level of investment, industrial structure, and locational factors. There is also great variation of economic efficiency among city sizes and regions (Zhou and Yang, 1990). The control of city size does not seem to be an appropriate policy because it may not fully utilize the economic efficiency and locational advantage of some cities. Because of the increasing influence of the market force under the open door policy, urban development is moving away from this policy. Most of the foreign investment occurred in extra-large and large cities in the Eastern Coastal region. Even the central government is not consistent in this policy. IN 1990, it announced a grandiose plan to develop Pudong in Shanghai, one of the largest cities in China. There may be a need to develop different urban development strategies for different regions and such strategies may need to be adjusted periodically to reflect the level of economic development. For example, large cities may be developed in the relatively underdeveloped areas in the Western and Central regions as focal points for developing these areas with the support of some medium-sized cities. Small cities and towns with rapid economic development in the Eastern Coastal region should be allowed to be further developed into medium-size and large cities to maximize their economic efficiencies and locational advantages.

Although the free market plays an increasing role in urban development under the open door policy, public policy still plays an important role too. One of the main reasons for the rapid development of towns and cities in the Eastern Coastal region is that the central government allows them to have more autonomy in attracting foreign investment, which is one of the main factors influencing economic development in the last decade. The central government also designated four SEZs and fourteen open coastal cities in the Eastern Coastal region which are catalysts for economic development in the Eastern Coastal region. The central government has allocated funding for the development of the SEZs and coastal open cities. Without such policies and investments, towns and cities in the Eastern Coastal region would not have been developed so rapidly.

Regional inequality between the Eastern Coastal region and the rest of the country is increasing. The share of industrial output of the Eastern Coastal region has increased from 59% in 1978 to 64% in 1991, whereas the Western region has decreased from 14% to 12%. This is understandable at present because it is hoped that once economic development has taken off in the Eastern Coastal region, it will diffuse to the interior provinces. However, there is a need to monitor whether diffusion will occur to determine the need to give selected cities in the interior provinces, such as major river ports along the Yangtze River, similar treatments as those at present enjoyed by the cities in the Eastern Coastal region in order to help to develop the interior provinces. Accessibility in transportation and communication plays an important role in opening up a region to foreign investment and world market. Coastal cities are developing more rapidly than non-coastal cities mainly because of its accessibility to the outside world. If China is to develop the interior provinces, its internal transportation and communication systems have to be improved.

There has been increasing competition among cities and towns for foreign investment. The competition is at all levels. Competition exists among different districts of a city, among different cities and towns, and among different provinces. To be more competitive in attracting domestic and foreign investments, many preferential treatments are given and sometimes rules are bent. This has created problems in planning and managing cities and towns. However, more importantly, there is a rise of localism and lack of cooperation in regional development. Localism is especially visible in regions which are developing very rapidly such as the Pearl River Delta. Four international airports are to be built in Zhuhai, Macau, Hong Kong and Shenzhen, which are less than 50 km. from each other. Unlike the past where the State allocated resources for major infrastructure project, local government can raise funding for infrastructure projects. Because of the lack of coordination, it may be a

waste of resources. There is a need to have better coordination of regional development and planning.

## NOTES

1. Eastern Coastal, Central and Western regions are the regional definitions used in the Seventh Five Year Plan (1986-90). This is different from the regional definitions commonly used by Chinese researchers in the early 1980s which divide China also into three regions, i.e. coastal, interior, and frontier regions. Eastern Coastal region is the same as coastal region with the inclusion of Jilin and Heilongjiang, i.e. Heilongjiang, Jilin, Liaoning, Beijing, Tianjin, Hebei, Shandong, Jiangsu, Shanghai, Zhejiang, Fujian, Guangdong, Hainan, and Guangxi. Western region is the exclusion of Nei Mongol of the frontier region and the addition of Shaanxi, Sichuan, Guizhou, and Yunnan, i.e. Shaanxi, Sichuan, Guizhou, Yunnan, Ningxia, Gansu, Qinghai, Xizang, and Xinjiang. Central region includes Nei Mongol, Shanxi, Henan, Anhui, Hubei, Jiangxi, and Hunan.
2. Cities are classified into four categories based on the non-agricultural population in the city proper (*shiqu*) and suburban districts (*jiaoqu*) (State Council, 1984). Extra-large cities are those with non-agricultural population of over one million; large cities are those between one million and 500,000; medium-sized cities are those between 500,000 and 200,000, and small cities are those less than 200,000.

## REFERENCES

- CHAN, Kam Wing (1992), "Economic Growth Strategy and Urbanization Policies in China, 1949-82", *International Journal of Urban and Regional Research*, Vol. 16, No. 2, pp. 275-305.
- CHAN, Kam Wing and Xueqiang XU (1985), "Urban Population Growth and Urbanization in China Since 1949: Reconstructing a Baseline", *The China Quarterly*, No. 104, pp. 583-613.
- CHANG, S.D. (1976), "The Changing System of Chinese Cities", *Annals of the Association of American Geographers*, Vol. 66, No. 3, pp. 398-415.
- CHANG, S.D. (1989), "The Changing Pattern of Chinese Cities 1953-84", in Chi-Keung LEUNG, Chi-Yung JIM and Dakang ZUO (eds.), *Resources, Environment and Regional Development*, Hong Kong: Centre of Asian Studies, University of Hong Kong, pp. 302-331.
- CHANG, S.D. and R.Y. KWOK (1990), "The Urbanization of Rural China", in R.Y. KWOK, W. PARISH, and A.G.O. YEH (eds.), *Chinese Urban Reform - What Model Now ?*. New York: M.E. Sharpe, pp. 140-157.



- EDITORIAL BOARD OF SHENZHEN SPECIAL ECONOMIC ZONE YEARBOOK (1992), *Shenzhen Statistical Yearbook 1991*, Shenzhen: Editorial Board of Shenzhen Special Economic Zone Yearbook.
- FAN, C. Cindy (1992), "Foreign Trade and Regional Development in China", *Geographical Analysis*, Vol. 24, No. 3, pp. 240-256.
- FEI, Xiaotong, (1984), *Small Town, Big Problem*, Jiangsu Province Small-Town Research Group, Compendium 1, Nanjing: Jiangsu People's Press. (in Chinese)
- JAO, Y.C. and C.K. LEUNG (eds.) (1986), *China's Special Economic Zones: Policies, Problems and Prospects*, Hong Kong: Oxford University Press
- KIRKBY, R.J.R. (1985), *Urbanization in China: Towns and Country in a Developing Economy 1949-2000 A.D.*, London: Croom Helm.
- KUEH, Y.Y. (1992), "Foreign Investment and Economic Change in China", *The China Quarterly*, No. 138, pp. 637-690.
- KWOK, R.Y. (1988), "Metropolitan Development in China: A Struggle Between Contradictions", *Habitat International*, Vol. 12, No. 4, pp. 195-207.
- LEUNG, Chi Kin (1990), "Locational Characteristics of Foreign Equity Joint Venture Investment in China, 1979-1985", *Professional Geographer*, Vol. 42, No. 4, pp. 403-421.
- LO, C.P. (1987), "Socialist Ideology and Urban Strategies in China", *Urban Geography*, Vol. 8, No. 5, pp. 440-458.
- MA, Laurence J.C. (1976), "Anti-Urbanism in China", *Proceedings, Association of American Geographers*, Vol. 8, pp. 114-118.
- MA, Laurence J.C. and Gonghao CUI (1987), "Administrative Changes and Urban Population in China", *Annals of the Association of American Geographers*, Vol. 77, No. 3, pp. 373-395.
- MINISTRY OF CIVIL AFFAIRS (1986), *Administrative Districts Handbook of the People's Republic of China*, Beijing: Guangming Daily Newspaper Press. (in Chinese)
- PHILLIPS, D.R. and A.G.O. YEH (1990), "Foreign Investment and Trade - Impact on Spatial Structure of the Economy", in T. CANNON and A. JENKINS (eds.) (1990), *The Geography of Contemporary China: The Impact of Deng Xiaoping's Decade*, London: Routledge pp. 224-248
- SKINNER, G. William (1977), "Regional Development in Nineteenth Century China", in G. William SKINNER (ed.), *The City in Late Imperial China*, Stanford, C.A.: Stanford University Press, pp. 211-249.
- STATE STATISTICAL BUREAU (1990), *The Forty Years of Urban Development*, Beijing: China Statistical Information and Consultancy Service Center. (in Chinese)

- \_\_\_\_\_ (1991), *China Statistical Yearbook 1991*, Beijing: State Statistical Bureau. (in Chinese)
- STATE COUNCIL (1984), *Regulations on City Planning*, Beijing: State Council. (in Chinese)
- VOGEL, Ezra F. (1989), *One Step Ahead in China: Guangdong Under Reform*, Cambridge, Mass.: Harvard University Press.
- WHYTE, M.K. and W.L. PARISH (1984), *Urban Life in China*, New York: Praeger.
- XIE, Yichun and Frank J. COSTA (1991), "The Impact of Economic Reforms on the Urban Economy of the People's Republic of China", *Professional Geographer*, Vol. 43, No. 3, pp. 318-335.
- XU, Xueqiang (1984a), "Characteristics of Urbanization in China - Changes and Causes of Urban Population Growth and Distribution", *Asian Geographer*. Vol. 3, pp. 15-29.
- \_\_\_\_\_ (1984b), "Trends and Changes of the Urban System in China", *Third World Planning Review*, Vol. 6, No. 1, pp. 47-60.
- XU, Xueqiang and Si Ming LI (1990), "China's Open Door Policy and Urbanization in the Pearl River Delta", *International Journal Urban and Regional Studies*, Vol. 14, No. 1, pp. 49-69.
- YAO, Shimou et al. (1992), *The Urban Agglomerations of China*, Beijing: China University of Science and Technology Press. (in Chinese)
- YEH, Anthony Gar-On and Xueqiang XU (1984), "Provincial Variation of Urbanization and Urban Primacy in China", *The Annals of Regional Science*, Vol. 23, No. 3, pp. 1-20.
- \_\_\_\_\_ (1990a), "Changes in City Size and Regional Distribution 1953-86", in R.Y. KWOK, W. PARISH, and A.G.O. YEH (eds.), *Urban Reform - What Model Now?*, New York: M.E. Sharpe, pp. 45-61.
- \_\_\_\_\_ (1990b), "New Cities in City System Development in China 1953-86", *Asian Geographer*, Vol. 9, No. 1, pp. 11-38.
- YEUNG, Yue-man and Xu-wei HU (eds.) (1992), *China's Coastal Cities: Catalysts for Modernization*, Hawaii: University of Hawaii Press.
- ZHOU, Yixing (1988), "On /the Relationships Between Industrial Output and City Size", *Economic Research*, No. 5, May, pp. 74-79. (in Chinese)
- ZHOU, Yixing (1991), "The Metropolitan Interlocking Region in China: A Preliminary Hypothesis", in Norton GINSBURG, Bruce KOPPEL and T.G. MCGEE (eds.), *The Extended Metropolis: Settlement Transitions in Asia*, Honolulu: University of Hawaii Press, pp. 89-111.
- ZHOU, Yixing and Qi YANG (1990), "Analysis of China's Urban Industrial Efficiency", *Economic Geography*, Vol. 10, No. 1, pp. 43-50. (in Chinese)

# **FUTURE DEVELOPMENT OF CHINESE CITIES**



## 8

# **INCREASE OF URBAN FLOATING POPULATION AND TRANSFER OF RURAL LABOUR**

*Mengbai Li*

Since mid-eighties of this century, the migration of floating population from rural to urban areas has grown rapidly in Mainland China, reaching a total of 70 million by 1988. The majority swarms into large cities, in particular Beijing, Tianjin, Shanghai, Guangzhou, Xian, Chengdu, Chongqing, Hangzhou etc. This urban floating population grows every year, extends its period of stay and is involved in a wide range of trades - a new social and economic phenomenon arising from the reform and open-door policies of our country. The emergence of the floating population in China has made a direct impact on its big cities, and to various degrees affects the national economy, social development, urban-rural relationship as well as its urbanization and modernization process. From both the present and long term perspectives, it is significant in theory and practice to identify this social and economic phenomenon, study its pattern of activities and influence, and develop action plans to address its problems.

### **GENERAL CHARACTERISTICS OF THE FLOATING POPULATION**

The floating population generally refers to the "people who leave their place of origin and engage in activities of various nature without a permanent settlement". This paper will focus on the effects of the floating population on urban development. Considering that the floating population in China is a specific product of its system of household registry, and is different from the

"migrant population" and "population movement" in other parts of the world, it is therefore defined as "people who have not been registered in their city of residence but stay there and engage in activities of various nature."

According to the results of surveys conducted in various large cities, the characteristics of the Chinese floating population are as follows:

- 1) The floating population in China grows every year. For example, the total floating population arriving in Shanghai was 1,020,000 in 1984, up 65% in comparison with that recorded in 1981 (620,000); 1,830,000 in 1986, up 79% when compared with 1984; 2,090,000 in 1988, up 14% and 237% in comparison with 1986 and 1981 respectively. The total floating population in Beijing reached 1,310,000 in 1988, up 14%, 24% and 337% in comparison with the figures in 1987 (1,150,000), 1986 (1,050,000), and 1980 (300,000) respectively. (Table 8-1). During the mass migration tide in spring 1989, the floating population gathered in Guangzhou and the conglomerate of townships in the Zhujiang delta numbered almost 5 million, making a substantial impact on Guangzhou, nearby townships and the rail transport.

**Table 8-1 Total Floating Population by Year in Ten Major Cities**

City	Total Number of Floating Population (x 10,000 per day)							
	1980	1981	1984	1985	1986	1987	1988	1989
Shanghai		62	102		183		209	
Beijing	30	39		90	105	115	131	
Guangzhou	30		50		80	114	117	
Tianjian			29	50	57	86	112	
Wuhan		25	35	50	81			75
Chongqing		16			48		67	
Chengdu		20	27	35		53		53
Hangzhou	15		20	30		40		50
Zhengzhou	8				23	31		37
Taiyuan	8	10		13	25	26	29	36

Source : Surveys and statistics from various cities.

- 2) The floating population extends its period of stay in the cities. Take Beijing as an example. According to a survey, the floating population which arrived in Beijing before 1982 generally stayed for a period not

exceeding 10 days, except those who required foster care or medical treatment. The length of their stay has gradually increased. Since 1986, half of the total floating population (about 500,000 to 700,000 people) has stayed for more than 6 months. This trend is common in large cities such as Tianjin, Shanghai and Guangzhou. In some cities, 30% of the floating population stays for more than a year. According to the general international practice, members of this group can be included as part of the permanent population of the cities.

- 3) Job seekers comprise the largest proportion of the floating population. Before the eighties, two-thirds of the floating population in big cities comprise those who travelled for foster care, medical treatment or to visit their relatives. Since the mid-eighties, those who are visitors (8.03%), or are under medical treatment (3.15%) or foster care (2.36%) have made up only 14 % of the total floating population. Job seekers now almost amount to 50% of the total floating population. Job seekers account for 68% in Wuhan and 62.8% in Beijing respectively, compared to the lowest percentage of 33.5% in Zhengzhou. (Table 8-2)
- 4) Originating from the countryside, the involvement of the job seeking type of the population in the job market is of temporary and unstable nature. The reasons are two-fold. In the first instance, these people are surplus labour of the agricultural sector and may not be able to meet the demands of the industrial sector. Most of them work as labourers or junior artisans in construction, textile, coal mining, transport of goods, environmental hygiene and household services which are relatively tough, dirty and tiring work. Hence they are ready to change jobs when opportunities arise. Secondly, the majority have not cut off their links with land and agricultural production, and regard the "contract responsibility system linked to production" as a source of "social security". This means when for some reasons the migrant labourers are unable or unwilling to work in the cities, they can always return to the countryside and engage in farming again.
- 5) The urban functional type of the floating population is mainly involved in the service business (including trading sales). It comprises 11.69% of the total floating population in the big cities (second only to construction workers in the job seeking group which make up an average of 14.63%). Its proportion in the floating population is even higher in cities which thrive in commerce and trading. The corresponding percentages are 14.8%

in Shanghai; 12.7% in Guangzhou; 11.8% in Chengdu; 12.0% in Zhengzhou, all of which are above the total average figure of the big cities. The fact that construction and service business workers top the list of the urban floating population indicates that the functions of many Chinese cities have been expanded and strengthened as the result of the open door policy and urban development under the economic reform programme.

**Table 8-2 Classification of Floating Population in Ten Major Cities**

City	Total Quantity (x 10,000 per day)	Social Type (%)	Urban Functional Type (%)	Job Seeking Type (%)	Other Types (%)
Shanghai	209.0	19.3	32.6	41.3	6.8
Beijing	130.0	8.8	26.0	62.9	2.1
Guangzhou	91.4	6.2	34.9	54.6	4.3
Wuhan	75.7	14.7	16.6	68.0	0.7
Chengdu	53.0	12.2	34.8	47.1	5.9
Hangzhou	50.4	6.7	27.3	61.2	4.8
Zhengzhou	37.4	9.6	40.9	33.5	16.0
Taiyuan	35.8	17.8	22.7	46.9	12.7
Harbin	22.5	2.8	10.4	57.3	29.5
Jilin	7.3	31.6	13.0	46.6	8.8

Notes : Social type includes those visiting relatives, under foster care and attending boarding school.

Urban functional type includes those under medical treatment, touring, attending meetings, conducting research, liaising business and on transit etc.

Job seeking type includes temporary workers, traders, transport workers, helpers, tradesmen etc.

Other types include street-sleepers and the unclassifiable.



## **GROWTH IN FLOATING POPULATION IS AN INDICATION OF THE MIGRATION OF RURAL LABOUR**

Some 60% of the floating population in big cities comes from the countryside. The majority falls into the job seeking type. Over 62% are aged between 18 and 50. The ratio of male to female is 2.5:1. These pointers indicate a significant social and economic phenomenon - the rural labour is migrating to the urban and non-agricultural sectors.

The migration of rural labour is the product of a wide-ranging and profound economic, social and policy factors. It is also the inevitable consequence of the reform and open-door policies in China.

- 1) Peasants now enjoy greater freedom in the choice of employment, which can be traced back to the three basic components of the rural economic reform in China since 1979 (1) implement the "contract responsibility system linked to production on land"; (2) change the system of state monopoly for purchase and distribution of cereals and cotton to the market-oriented contract purchase system; (3) allow peasants to involve in non-agricultural sectors, and support their efforts in establishing rural enterprises. As a prelude to these reform measures, the government has abolished the people's commune system and extended its management to individual rural households. These actions have caused a fundamental change in the grassroots management system and the compulsory control mechanisms which had been in place for three decades, and substantially reduced government intervention in the employment of rural labourers. As a result, more job opportunities are available to peasants who have become an independent interest group. Upon fulfilment of their necessary responsibilities to the country, peasants now enjoy greater employment autonomy and rights in business opportunities. The reform and open-door policies have also challenged the peasants' traditional, conservative and narrow views, and encouraged them to strive for a higher income and seek a fortune in the outside world. On the other hand, the existing arable lands are unable to sustain the sizable labour force. As a result, besides joining the rural enterprises, the surplus labour form a floating population and flock into the cities for job opportunities.
- 2) There is a mismatch between limited arable land and growth in labour force. In 1952, the average sown area of the agricultural labour force in China was 12.24 acres per capita. From 1952 to 1987, the total sown area of the entire country remained at 2.1 billion acres. However, during the same period, the agricultural labour force increased 84% from 173 million to 317 million, and the average sown area per capita fell to 6.84 acres.

According to the *China Statistics Annual Report* (1992 edition), the total arable land in the whole country measured only 1,434,804,000 acres, with an agricultural labour population of 341,863,000 in the same year. The improvement in agricultural technology level and labour production rate has also accelerated the emergence of the rural surplus labour. Following the lifting of bans and the increase in land exploration, the lands used for the purposes of non-agricultural production and construction are increased every year. The use of lands for non-agricultural purposes has often outweighed the attempts to create arable land, and resulted in a declining trend in arable land. The conflict between abundant people and scarce land has aggravated to such an extent that there is no land available for contracting out in some parts of the country. For example, there are 4 villages in Fuyu City, Baicheng Region, Jilin Province which started the "contract responsibility system linked to production" in 1983. The farmland was contracted out for 15 years once and for all. The 4 villages had a original workforce of 1,656. Four years later, due to the lack of land, the additional workforce of 557 in the villages had to leave their homes for livelihood. This is one of the primary reasons for rural labourers to migrate to the urban and non-agricultural sectors.

- 3) Cities are becoming more attractive. From a historical perspective, peasants have always looked forward to the better production and living environment in the cities. Since the launch of the reform and open-door policies and the coastal development strategies in the eighties, the Chinese urban economy, in particular that of the coastal cities, has witnessed phenomenal growth. As a result of the growth in development and capital investment, job opportunities are relatively abundant and wages have also gone up. The drive for material benefits has caused spontaneous migration of the rural labour to the cities and the coastal region, like the "migration tides" towards the Special Economic Zones, Guangdong and Hainan.
- 4) Relevant government policies on migrant labour have been relaxed. Since the eighties, the government has introduced the policies for supporting village and township enterprises and permitted the entry of peasants into cities for employment and business. Peasants are allowed to stay in the cities almost permanently under the status of temporary residents. Most medium-sized and large cities have also allocated open areas and side streets for use as markets made up of stalls. To a certain extent these measures have signalled the official approval of the migrant labour in the cities. It is very common now to find markets in large and medium-sized cities with rural labour as their backbone. In some

metropolises, "temporary" settlements of rural labour specializing in particular trades have also emerged, such as the "tailors' village", the "opticians' village" and the "Xinjiang village" which sells beef, lamb and processed foods.

- 5) The trend of migrant labour will continue to grow. At present, China is still in the primary stage of socialism. The economic development in different regions is very unbalanced, with distinct contrast between urban and rural areas. Cities continue to be a great attraction to peasants. On the other hand, the total rural labour force grows by about 10 million annually. According to Government projection, the total rural labour force will increase to 546 million by the end of this century. It can be expected that the gap between scarce arable land and growing labour force will continue to widen, and the only plausible solution is to transfer them to the urban and non-agricultural sectors. The direction and rate of transfer will vary depending on the economic development in different regions, the growth of medium-sized and small cities and the emergence of new townships. However, it is expected that the total rural floating population will persist to grow - a major social problem to which the government and concerned parties should address.

## **THE IMPACT OF FLOATING POPULATION ON URBAN AND RURAL DEVELOPMENT**

The sharp increase in the floating population and the mass migration of rural labour to cities and non-agricultural sectors have impacted on the rural and especially the urban development. Migrant labour has both positive and negative effects on the development process in China:

### **Positive Impact**

- 1) Challenges the conventional concept and structure of employment. The floating population provides cities with new and active labour resources, and facilitates the enterprises to reform their recruitment system.
- 2) Supplements the shortage of labour in certain trades (such as construction, textile, coal mining, cleansing services etc.). The availability and quality improvement of the labour force has brought about economic and social benefits to the cities.

- 3) Fuels the development of the urban tertiary industry, in particular the trading, food, service and tourist industries. The thriving urban markets provide greater convenience for the daily life of city-dwellers and increases the revenues of the localities.
- 4). Breaks down the rigid demarcation of urban and rural sectors. Floating population enhances the economic, cultural, technological, material, informational and human resources exchange between urban and rural sectors and amongst cities, and strengthens the cooperative efforts and complementary development of the two sectors.
- 5) Accelerates the improvement of town planning and urbanization. In the light of the growing floating population, municipal governments have abandoned their previous approach of planning on the basis of a fixed and regular residential population, and started to consider the needs and potentials of the floating population during the planning process. From a lateral angle, the emergence of the floating population has expedited the urbanization process in China including the growth of cities, the escalation of various levels of cities and towns (such as the escalation from established town to small city, small city to medium-sized city ....), and the formation of new townships etc.
- 6) Promotes the exchange of ideologies and ideas between the urban and rural population. The exchange of ideologies and ideas will gradually help to change the traditional backward outlook of the rural sector on its road to modernization with respect to renewal of values, adoption of new ideas, technologies and methods, and the drive for continuous improvement.

The above are the most significant effects brought about by the migrant labourers and their regular travel between urban and rural areas (it is natural for them to travel regularly since their homes are still in the countryside). It is difficult to imagine how the nation can achieve urbanization and modernization if over 73% of rural population are idle in the villages and sheltered from the experience of urbanization. However, this is a significant social issue beyond the scope of this paper, and which I hope will be addressed by all concerned parties.

### **Negative Effects**

- 1) Increases the pressure on urban facilities. Firstly, the floating population increases the pressure on the urban infrastructure and medical facilities, and aggravates the shortage in such facilities, many of which have to

operate in excess of their capacities or in a defective condition. Secondly, the migrants have also put pressing demands on the "subsidized" provisions by the government (particularly before the implementation of price reform, products like cereals, cooking oil, meat, vegetables etc. were supplied to urban residents at prices below the costs of production). For example, the floating population had incurred an additional expense for livelihood subsidies of over 200 million yuan on the Beijing municipal government in 1988. Thirdly, migrant labourers have also caused management problems for municipal authorities in terms of planning, construction, transport, household registry, security and environment, and have increased government workload and expenses.

- 2) Increases the pressure on security management. The floating population comes from very diverse background, amongst which are the jobless and bad elements who have brought about escalation in crime and evil practices in the cities, such as illegal profiteering, theft, burglary, swindle, rape, prostitution, gambling and drug abuse. According to statistics compiled by the Shanghai Police Bureau, the proportion of floating population in arrested criminals is on the increase every year: 6.8% in 1983; 11.3% in 1985; 19.9% in 1987; 31.4% in 1989; which means a 25% increase in 6 years. With the increase in the street-sleepers, beggars and the returners after expulsion, the local governments are faced with an enormous task to accommodate and repatriate them. As a result of the urban-rural integration, communities of the floating population known as "new villages" are established, where bad elements can hide and illegal activities can easily take place. These developments have brought about considerable challenges to the authorities.
- 3) Increases the pressure on the management of planned birth control. Some rural migrants have violated the official regulation on birth control. Among the so-called "exceeding-birth-quota-guerrillas" found in almost every large city, there are couples who travelled to the urban areas for work or business reasons and took the convenience to give illegal births; others went to cities in order to escape from the management of planned births in their places of origin. According to research results, amongst the married women of reproductive age migrated to cities, the proportion of those who have given 2 and 3 illegal births are 14.49% and 9.4% respectively in Shanghai; the proportion of migrants giving 2 to 3 illegal births is as high as 29% in Wuhan. It is not uncommon to find migrant mothers who have had 5 illegal births. In 1989, the Beijing municipal government conducted a spot check on 303 migrant households in Fengtai



ities. Moreover, following the success of the rural economic reform and the removal of the barriers between urban and rural sectors, rural surplus labourers are now able to leave their homes to seek employment and business opportunities. These activities have promoted the growth of the floating population in China, which is also an indication of social progress of the country.

As mentioned in the preceding paragraphs, the rapid growth in the floating population has both positive and negative impacts on urban and rural development. The effects caused by different levels and types of the floating population are varied. For example, while the jobless migrants and the "guerilla-exceeding-birth-quota" have not brought any positive effect on urban development, the educated migrants have introduced technological information and products to the cities. Their daily consumption has increased government revenues, and their migration is entirely to the advantage of the cities. In general, among the sizable floating population, those who are entirely to the advantage of cities constitute the minority, and those who are entirely to the disadvantage of cities are even far less in number. The majority are migrants who generate both benefits and costs to the urban sector. It cannot be concluded in simple terms whether benefits of the floating population will outweigh the costs or vice versa, which depends on the situation of individual cities (including policies and management) as well as the size and composition of the migrant labour.

Demographic mobility is an essential condition for social, economic and cultural development. It is also a necessary condition and inevitable phenomenon of the socialist market economy. Municipal governments should welcome migrant labourers and provide assistance for their settlement wherever appropriate. They should also step up their efforts in propaganda, education and managements to support the legitimate endeavour of the migrants and to prevent or remove any illegal activities.

On the basis of the above knowledge, my colleagues and I had put forward the management initiative of "discreet guidance; appropriate regulation; whole-hearted service and sound management" in 1990 with respect to the floating population. We have also proposed the following measures to deal with its problems<sup>1</sup> :

- establish a central body to manage the floating population in big cities;
- formulate the relevant laws and regulations;
- ascertain the appropriate growth rate of the floating population;
- strengthen the market regulation of labour mobility;

- replenish the police force;
- gradually improve and strengthen the management of the household registry system;
- provide employment opportunities and social security for the migrant labourers; and
- strengthen propaganda and education efforts etc.

There is no single and permanent solution applicable to all situations. Individual cities should adopt actions which are appropriate to their specific needs and the ever-changing environment and circumstances.

From the national perspective, the central, provincial, municipal and the autonomous regional governments should further refine their policies on migrant labour, improve the legal system and strengthen their guidance and macro-regulation of the floating population. At the same time, it is necessary to expedite the development of a national planning system, promote urbanization in a systematic fashion and strengthen the development of cities and towns. This will enable cities and towns to develop at the pace of the growing economy, and in the long run form an integrated system of cities complementary with the national and regional economic network. This process will enhance the utilisation of the rural surplus labour and play a significant role in the economic development, urbanization and modernization process of China.

## **NOTES**

1. For details, please see Mengbai LI and Xin HU (1991), *Impacts of the Floating Population on the Development of Large Cities*, Beijing: Economic Daily Press.



## THE CITY AND THE CITY'S INFRASTRUCTURE

*Guangtao WANG*

As the market economy develops, a city will grow rapidly. A city is the hub of the economy, culture, and information flow. A city is the backbone of national economic development, whereas infrastructure is the basic structure of the city, and the basic condition for a city's survival and development. The influences of the city depend on the condition of her infrastructure and the provision for production and living, so developing the infrastructure of the city is the main responsibility of the government. Urban utility provision is the basic sector for our country's national economic development, including water supply, heat supply, gas, road, public communication, water, garden, environment and public hygiene. This paper will briefly introduce the city and city's infrastructure in China.

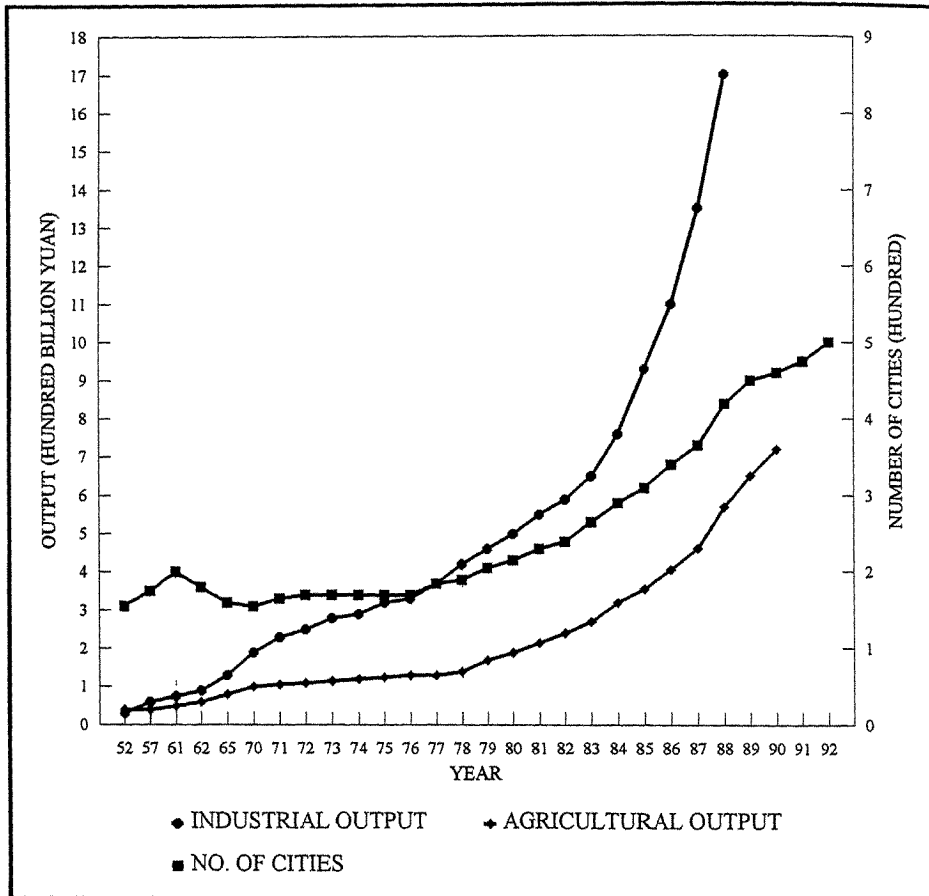
### ECONOMIC SYSTEM AND THE CITY

The objective of economic system reform in China is to transform the planned economy to market economy. The function of the city will change from consumption and industrial production to comprehensive service provision. These changes will affect the process of the city's development.

At the beginning of the People's Republic and during the First Five-Year Plan period, the basic task of our country's economic development was to establish an independent and self-sufficient socialist industrial system and national economic system. In order to ensure the survival and development of new China, large scale planned economic development was *staged*, and a centralized financial and economic system was established. At that time, the focus of the government changed from the countryside to the cities. Relying on

the strength of the centralized economic system, the whole county's manpower, resources, and finance were used to implement the 156 important projects. Within the First Five Year Plan period, the socialist industrial system was generally established and the agricultural economy was changed to an industrial one. In this process of changes, a lot of newly industrialized cities appeared and became the main forces behind China's industrial system. From 1949 to 1957, the number of cities in China increased from 132 to 176, with an annual average increase rate of 10%, which was compatible with the speed of national economic development (Figure 9-1).

Figure 9-1 Outputs and the Number of Cities Over the Years



Because of the denial of the concept of market economy, a highly centralized economy has been maintained for a long time and has resulted in many obstacles for the city's development. Too much attention was paid to industrialization; the development of the service sector in the city was considered as equating to transforming the city to a *consumption* one, and the functions of comprehensive economic development were neglected. Due to the disaster of agriculture in that time, the government had to pay more attention to agricultural development. In 1961, the number of cities was 208. In 1962, the national economy was adjusted and a lot of projects were stopped. Some cities became counties. At the end of 1965, the number of cities decreased to 168, 40 less than that in 1961, decreasing by 20%. After 1966, due to political events, the normal order of development was destroyed, and the speed of agricultural and industrial development was slowed down. The number of cities has increased only by 26 from 1966 to 1978, reaching 194 in 1978.

The Third Meeting of the Central Committee of the Eleventh Chinese Communist Party Conference signified a recovery of the national economy and the focus of the party was brought to economic development. In order to modernize socialism, the economic system must be reformed. The reform was first implemented in the countryside. The peasants were motivated to produce more products; agricultural development was greatly promoted and the rural economy was developing into specialization, commercialization, and modernization. With the rapid development of agriculture, increase in agricultural products need much larger market. At the same time, peasants' demand for industrial products, science and technology, culture and education also increased. In order to the needs arising from agricultural development, the basic characteristics that the city should possess have gradually appeared: With the development of the countryside, the demand of communication between the city and the countryside has increased. The development of the city has promoted the development of the countryside benefitting both the city and the countryside. Thus the city is the main force of socialist modernization. Both the experience abroad or domestic affirm that the city is the center of the economy, politics, science and technology, culture and education, and industry.

The successful experience of rural reform and the demand of the countryside for the city's services have provided the condition to overcome the obstacle of the urban development and to promote the urban economic reform. In 1984 the Chinese Communist Central Committee announced the decision on economic system reform whereby the urban economic reform and the whole economic system's reform were paid more attention. The focus of economic system reform changed from the countryside to the cities. The objective of the

reform was to establish a socialist market economy, increasing the productivity of both the enterprises and the socialist economic system. In the process of the city's reform, the ability of organizing production and adjusting to the macroeconomy must be considered. In the industrial distribution plan, the functions of commerce, culture, education, information and finance must be considered. The 14th Conference of Chinese Communist Party stated clearly the objective of China's economic reform and the position and function of the city. From 1979 to 1992, the number of new cities has increased by 326, i.e., an average increase of 25 per year

In order to adapt to the urban economic reform and to facilitate a more efficient functioning of the city, the reform of the city's management was needed which has focused on two aspects. Firstly, this includes urban comprehensive economic reform, including the reform of her production, exchange, and distribution. Power was given back to the enterprises who would be responsible for their own profit and loss. Another aspect of reform was the administration framework that the city would be given the power to control the county. The highly centralized planned economy has resulted in the ambiguous function of the city and its ambiguous position in the national economic development. The delineation of the area under control of the city in the old system did not aim to promote the development of both the economy and the city's functions, but for political consideration. At that time, there were two governments, i.e., the country one and the city one, in an area. Facing this situation the Central Committee of the Chinese Communist Party announced a "local government reform", which set out the following framework: the economically advanced areas would only have one government, and the city would directly control the county. By and large the provincial governments would not directly control the enterprises. This new management system also requires the city government to pay more attention to its center function.

Through these practices, this reformed management system has thus made the functions of the city and the countryside functioning more properly.

## **ECONOMIC SYSTEM AND THE LAND OF THE CITY**

The changes of the city's land utilization is an important part of the urban economic system reform. After the establishment of the market economic system, the nature and the utilization system of urban land becomes a basic component of the urban market system. Before 1949, most of the land in the cities of China was owned by the private sector. After 1949, the land of the city has gradually come into public ownership. Under the traditional planned

economy, there were no such ideas of marketable land, land value, and land as a commodity. Land was distributed by the government; there were no economic consideration, no rent, no time limit, no trade, and no lease. As a result, there was a lot of idle land, and no money was collected as land rent for urban development.

With the economic reform, the independent enterprises will be able to reorganize their production system based on sound economic principles. As the land has a special function in the process of production, the function of the land will be evaluated within the market economy. In September 1988, the National Council announced the "Temporary Regulation of the City's Land Utilization". The Constitution and the law of land management were also revised. In 1990, the National Council announced "The Temporary Management Regulation for the Development of Land by Foreign Investors". This Regulation has provided the legal foundation for land utilization reform, and has facilitated the inclusion of land into the market.

The land of the city is a limited resource and a factor of production which can bring huge economic benefit. The location of the land and its infrastructural provision are the key factors determining land value.

Under the planned economy, the infrastructure was not much attended because the land was not considered as a marketable commodity, nor something to be used efficiently. Yet under the market economy, the land user will consider the benefit from utilizing the land. The land owner (i.e. the government) will evaluate the value of the land basing on its location and available infrastructure. Furthermore, the land will be traded, and land resource allocation will be adjusted. The benefit from land transaction will be reinvested in infrastructural development. As a result, the location factor and also the infrastructural condition will be changed and the value of the land will increase. During the transformation from the planned economy to the market economy, the factors of production will be reorganized. Therefore, under the new economic system, a city plan must meet new requirements.

The city plan will be implemented basing on the nature and the condition of the society. In balancing resources, the environment, and investments, the city plan plays an important role in the policy-making for the urban development and economy. For a long time, the city plan had been made basing on a highly centralized and planned economy. The city plan was mainly concerned with the power of the administration. Project comparison and cost-benefit analysis were rarely employed. Yet with the establishment of the land market, city planning demands new ideas. The land use plans must now reflect the reasonable resource allocation basing upon the mechanisms of market economy. For example, if houses and apartments are built in the prime

commercial area of the city, the land will be wasted. The environment of the city will be affected, and the city's re-construction will be difficult.

Under the market economy, the land users will pay for land usage and reap benefit from the land. Thus basing on market demand and the value of the land use, the economic factors will be considered in city planning. The land with good location and infrastructural condition will be used by the sectors able to obtain high benefits, as these enterprises can afford high land price. The structure of land use will be optimized and a new channel of capital accumulation will be materialized. All in all city planning must face up many new tasks.

## **ECONOMIC SYSTEM AND THE INFRASTRUCTURE OF THE CITY**

The objective of the economic system reform is to make the enterprises more efficient. The development of the enterprises depends on the business environment and the urban infrastructure. The function of the city is to provide a conducive environment, and improving the investment environment. The city's infrastructure will be helpful for the urban investment system reform.

Under the planned economy, production was viewed as more important than the living condition. The important roles of the city's infrastructure and the service sector were neglected. At that time, the urban development was depended on the other sectors' requirements. If a factory needed water, water supply would be considered; if a road was needed, a road would be built. When cutting the whole country's capital investment, infrastructural investment would be cut first. When planning the budget, infrastructure would be the last consideration. As a result, the investment in infrastructure was much less than the level of the developed countries. Due to the lack of water, gas, roads and parks in the cities, the quality of life was low. Houses, water, roads, electricity and other utilities are in fact a whole system. Yet, in the past practice of China, different sectors were disconnected. The city's infrastructural development was delayed and normal development of the economy was affected.

After the reform and the open door policy have been implemented, the resultant economic booming has provided the favourable conditions to adopt new ideas: The importance of urban infrastructure in economic development has been paid more attention and urban infrastructure is no longer an insignificant sector. Practice has affirmed that the infrastructure of a city is an

important part of the society's comprehensive service system: It is the basis for the city's economic development.

In the past the capital source of city development included tax on city maintenance, extra fees on public utilities, national planned investment, finance from the central and local governments, additional budget from local government, and equity from the public. Yet in general, capital came mostly from government finance. The government was not only responsible for the investment in new infrastructure but also the maintenance of the infrastructure. The losses of the city's utility business were compensated by government finance, which had in fact been effectively the only source of capital. Capital investment from other sources was rare.

Departmental management was the common management model. For instance, the maintenance of utility was the responsibility of the government, this lowering the efficiency of utility's maintenance and repair. Most of the government organizations shouldered both the functions of the government and enterprises and there has been no clear distinction between the two. Enterprises could not make decision for their own businesses and there were a lot of conflicts among different government organizations. As a result, the efficiency of the administration was low, and the resources were wasted.

In 1989, the State Council stated out its industrial policy. In 1992, the Central Committee of the Chinese Communist Party and the State Council decided to promote the development of the service sector. In both of those policy and decision, the utility sector was considered as a basis for national economic development. As this position of the utility sector was assured, a series of reforms on development, investment and management system were also followed. A new system was established transferring infrastructure from a supporting position to the leading position.

## **THE CITY INFRASTRUCTURAL DEVELOPMENT OF CHINA AND THE FRAMEWORK OF HER MANAGEMENT POLICY**

### **Brief Introduction of the Current Situation: The Most Rapid Development Period of City Infrastructure**

Since the open door policy and the reform were implemented, especially after the Conference of the Chinese Government on the City's Development in 1986, utility development has grown quickly; the level of service and management quality has improved a lot; and the city development has grown rapidly.

The standard of urban infrastructure has risen. From various indicators of the public utilities, we can find that from 1949 to 1978 and thereafter, the level of utility development has increased in various degrees (Table 9-1).

**Table 9-1 Utility and Infrastructure Development, 1949-1978**

<b>Utility and Infrastructure</b>	<b>1952</b>	<b>1978</b>	<b>1986</b>	<b>1992</b>
Water Supply (10 thousand ton)	266	2,530	1,040	1,600
Per Capita Water Consumption for Daily Living (litre)	38	121	162	189
Road Area (100 million square meters)	0.89	2.25	6.15	9.5
Per Capita Road Areas (square meters)			4.88	6.2
Number of Buses (10 thousand)	0.04	2.58	4.95	9.1
Buses per Ten Thousand Population	0.83	3.25	4.60	5.90
Rate of Provision of Gas Supply (%)	1.5	13.9	28.5	52.0
Green Open Space Area (10 thousand hectare)	12.8	8.2	25.1	41.0

From these data, we can find that after the adoption of the open door policy in 1978 and the city economic reform in 1984, the urban infrastructural development has been very rapid. From 1986 to 1992, the standard of city infrastructure has improved even further. Comparing the level of 1992 to the level of 1986, the capacity of water supply has increased by 54%; the average living water consumption per capita per day has increased by 15%; road area has increased by 55%; gas usage has increased by 21%; park area has increased to 4.2m per capita; green land coverage has increased to 21%; the rate of garbage unharmed treatment has increased to 25%; and the rate of waste water treatment has increased to 17%.

In 1952, the investment in utility was only 164 million yuan. It was 835 million yuan in 1978, 8 billion yuan in 1986, and 28.3 billion yuan in 1992. The net increase of the investment from 1991 to 1992 was 11 billion yuan. The investment on utility in 1992 was 3 times more than the total investment from 1952 to 1978 and has surpassed the total investment from 1978 to 1985.



Although there is a successful achievement in urban development, as the reform is still in the first stage, the urban management reform is still lagging behind those of the other industrial sectors. There are still a lot of conflicts among the different government organizations: The running of the utility companies does not satisfy the requirements of the market economy: There are still no inefficient methods and regulations in the financing system; and the price reform of the utility is still difficult. The unreasonable city administration system is still hindering the development of the city: The infrastructure is still not adequate and cannot satisfy the development needs of the economy and the society and the lack of infrastructure is still a bottleneck of economic development. It is especially true under the economic booming situation, where the lack of utility and the low service level have already affected the improvement of city's production, living condition, and investment environment.

**Table 9-2 Utility and Infrastructure Investments, 1949-1978**

Period	Percentage of GNP (%)	Percentage of Fixed Capital Investment (%)	Percentage of Capital Investment (%)
1952	0.24	3.76	3.76
1953-1958	0.31	2.33	2.6
1959-1963	0.41	1.96	2.16
Adjustment	0.22	1.81	2.23
1966-1970	0.14	1.09	1.44
1971-1975	0.15	0.85	1.15
1976-1980	0.3	1.61	2.03
1981-1985	0.62	3.4	5.31
1986-1990	0.75	4.1	6.97
1992		5.55	
UN	3-5	10 above	---
The Chinese Way	1.5-2.2	2.2-10	12.18

Although a series of financing system reforms were adopted, the investment level in the city is still very low, and an annual 20 billion yuan extra budget is needed. The investments in utility after the establishment of new China are shown in Table 9-2.

The investments in the urban infrastructure are never more than 1% of the GNP, taking up about 2% of the fixed capital investment of the public owned enterprises. In 1992 it still amounted to only 5.55%. This percentage is much lower than the level of other countries in the world. The investment in the city's infrastructure takes up 3-4% of the GNP in Western Countries. The suggested percentage by UN is 3-5% for developing countries, which is 5 times more than the level of China.

The supply of utility could not satisfy the demand. There is a shortage of water supply, and the lack of water is 1000 m<sup>3</sup> per day: Drainage equipments and water treatment equipments are not widespread: The road system in the city is not perfect and is unreasonable: Communication and transportation is inefficient: The rate of garbage unharmed treatment is low and leading to environmental pollution: Green land coverage is limited, and the quality of public health and environment is low: The city is often dirty and disordered: Gas and heating supply are not enough resulting in air pollution. There is a big distance between the current level of utility and the planned level of utility in the year 2000.

If we consider the reasonable rating between the urban development and economic development, the balance between both sides is even worse. The provision level of urban infrastructure in China is just as that of the newly industrial countries in 1980s. There are still a lot of work to do in urban infrastructure.

**Table 9-3 Current and Planned Levels of Utility and Infrastructure in Year 2000**

Year	Per Capita Water Consumption Per Day (L)	Per Capita Road Area (m <sup>2</sup> )	Buses per 10 Thousand Population	Rate of Provision of Gas Supply (%)	Per Capita Green Open Space (m <sup>2</sup> )	Rate of Waste Water Treatment (%)
1992	186	6.2	5.9	52	4.2	17
2000	200	8.0	7.0	60	7.0	25
Difference	-14	-1.8	-1.1	-8	-2.8	-8

The city governments are the leaders of urban economic system reform and they play an important role in establishing the socialist market economy. In 1984, the Central Committee of the Chinese Communist Party made a decision on economic system reform, which pointed out that the government should pay more attention to make the city's center function work; to undertake good city planning, development and management; to build public utility; to control the environmental pollution; to guide and promote the coordination between the different enterprises; to modernize technology and management; to guide and promote trade; and to take care of culture, education, public health, social welfare and the service sectors. The city government should also make medium and long term plan of the economy and social development basing on the requirements of national economic development and local conditions. This year, the Chinese central government requires that in order to promote economic development, the functioning of the government should be changed more rapidly , and will not involve in enterprise activities. The government will be mainly responsible for comprehensive planning, policy-making, information-guiding, coordination, service-provision and supervision, i.e., the function of the government will change from micro management to macro management, from direct management to indirect management.

The main tasks of the city's administration are :

- 1) making and improving the law and regulation of the city's administration; managing the relevant sectors basing on the law; establishing and implementing law organization; educating people to obey the law;
- 2) paying more attention to managing the city's sectors; basing on the principle of the socialist market economy to coordinate the administrative power, sector managing power, and the public resource ownership; basing on the new laws and regulations from the administration reform to separate the administration power, sector managing power, and the enterprises managing power;
- 3) reforming investment system; having more investment sources; financing from government and compensating from marketing; the government finance including price system reform and utility fee; separating city development budget and city maintenance budget and having more reform from reinvestment;
- 4) improving the city's environment and the city's comprehensive functions under the leadership of the city government; improving the utility, comprehensive function of city, and services;

- 5) reforming the utility agencies, including their unclear function, extra employees, and high cost; improving the economic responsibility reform that are not very successful; having the utility agencies to be the enterprises to reinforce the government administration function;
- 6) improving the utility sector's reform, managing utility agencies basing on the market economy; getting benefit from, and continuing the utility agencies by, themselves,

### **Investment and Administration System Reform**

The objectives of the investment system reform are insuring the city's infrastructure development and getting more sources of capital. The general ideas of city development reform in our country are that:

- 1) The insured investment system for city development should be established. The main sources of the capital is from government finance. The sources of capital include utility budget, lease of the land, the increased value of real estate, the city's maintenance fee, extra utility budget, and central and local government finance.
- 2) The marketable utility system will be established such as loan and trustee. The income from utility will be used to maintain and replace the utility.
- 3) The reasonable utility price system will be established. The utility agencies will gradually become the independent enterprises which will be responsible for their own business, profit and loss, survival and expansion. The current non-marketable price will still be aided by the government. Under the principle of one administration, more enterprises and fair competition will be encouraged. Various sectors and different types of ownership will be encouraged to participate in city development. In the new investment system, the city's infrastructure is not only considered as public welfare and service sponsored by the government, but will also gradually be transferred to the market. The sources of capital will be increased.

Combined with the reform on the government function and organization, the city's administration agency will be responsible for all the city's government functions and their own functions. The utility enterprises run by all agencies will be totally supervised and coordinated by the city government. The right of public property will be owned by the city's government, but how to run the utility business will be decided by the

enterprises. All the prices will be independent from the government. The government will not be allowed to interfere with the business of the enterprises, but should guide the enterprises to achieve the objective set by the government through the market. The non-profitable utility will be managed and owned by the city government. The responsibilities of administration and utility maintenance should be separated. The agencies sponsored by the government should be managed as enterprises. The government should implement its functions basing on the macro-economy and establish a new administration system and market system.

## **PROSPECT**

Reform provides the opportunity for the city's infrastructural development and provides the condition for changing the function of the government. Reform on the investment system and administration system provides the basis for the city's infrastructural development. At the end of this century, the city's infrastructural planning, development, and management should be in order. There will be a kind of unique planning, reasonable distribution and comprehensive development. The sources of investment will come from government finance and compensation from the market, providing sound budget for the city's development. The levels of city's utility will be improved to satisfy the demand of economic and social development. It is expected that by 2000 the shortage of water supply in the city will have been overcome. Water supply will be 95% widespread and daily living water supply will be 200 litre per capita. Poor drainage system will be improved and will be 70% widespread; the sources of city water will be protected and the rate of waste water treatment will be 25%. Water pollution will be controlled. The road area per capita will be 8 m, and there will be 7 public buses per 10 thousand people. The transportation system will be reasonably arranged and more advanced. The sources of gas and heating will increase and the rate of gas usage will be 60%; greenland and park will be 7 m per capita; garbage will be transported by containers and the rate of unarmful treatment will be 20%.

The flood protection system will be established; the protection standard will be increased, and the area of parks and historical interests will be 1% of whole country's area. All in all the investment environment and living condition of the cities will be improved and the development of the city will be promoted.



# 10

## **CHINA'S CITIES, STRIDING INTO THE NEW CENTURY - Some Hard Thinking Done by Urban Planner**

*Deci ZOU*

### **CHINA IS STILL A DEVELOPING COUNTRY**

The life expectancy of mankind today has been prolonged by much more than that in the past, so there are even much more people who can enjoy life going beyond the year of 2000 A.D.; though the term, "striding into the new century" is imbued with imagination and craving. Now it may be almost affirmative and lucky to say: We will hail for ourselves the arrival of the 21st century.

Man has already created a vast amount of wealth (including material and spiritual) from ancient times to the present, and also been mastering more and more advanced science and technology. As for how to approach the problems concerning the future, nevertheless, the mankind always assumes an attitude of vagueness and nearsightedness. In light of the Chinese concept of philosophy, "have a foot had planted at the present and keep in view the future" is the basic way and viewpoint to probe into matters of the future

From the 1980s to the 1990s China's economy has brought about a new leap in the transformation of the economic system, the growth in scale and the development of urban construction; all of which have been the focus of the world's attention. How to evaluate these changes and how to regard China and China's cities today are very significant for the analysis and study of the future after the 1990s.

According to statistics, during the 1980s, China's GNP increased by an average of 9.2% a year, which is much higher than the average increase of all other countries, China's GNP in 1989 ranked 9th in the world.

The output of a variety of China's main products are among the best in the

world, such as coal, cement, cotton cloth, cereals, meats, etc.. The living standard of urban residents is double what it was ten years ago. The income of the urban population has shown a marked increase, and the quality of life has been greatly improved.

On the other hand, owing to the large scale of the population (more than 1.1 billion), per capita GNP has reached only US\$370, ranking 96th in the world and resting below the low-income line.

Although a number of main products have the highest output in the world, the per capita output is still far below the world's average level, such as steel, crude oil, and generated energy, etc. Though the cost of living urban areas has already reached the average level of the world, the living quality has not been up to the mark. For instance, a 1990s investigation showed that 13.5% urban housing was without a single kitchen and those without a single toilet, 53.1%.

The level of urban services has not yet been up to standard. The tertiary industry of the whole nation in 1991 only accounted for 27.2% of GNP, lower than the average level of low-income countries.

It is an necessary to cite more data, it is clean that in a general and broad sense China is still a developing country , though it has undergone a hi-speed economic development. Moreover, judged by the level of social development, the level of education, the quality of population, medical treatment and health care, and cultural and recreational facilities throughout the country, the level of development of China is still low. Consequently, it is not realistic to say China's economy is "developed".

In line with hi-speed economic growth, urban development is indeed developing at a high rate. In order to be objective, a report on a special topic made by the World Bank is cited below: during the period between the 1980's census and the following 1990's census, China's urban population increased by an average of 5% a year. In absolute terms, 26% of China's population in 1990, i.e., 300 million people, living in cities and towns, China has become a nation where the number of urban residents ranks first in the world. The scale of urban construction in the recent 10 years can be shown as follows: the proportion of the investment in urban housing construction to the national investment in infrastructural facilities has been twice as much as that during the previous 30 years. Since the beginning of the 1980s, on the average, 2 million apartment units of urban housing were completed in a year. The ratio of the investment in urban housing to that in urban infrastructure has steadily risen from 1:0.135 (1981) to 1:0.447 (1991), which approaches the lower limit of the appropriate proportion presented by the UN. The conditions of urban infrastructure have been improved substantially, especially the large scale construction such as subways, rapid-transit and hi-speed roads, bridges and



projects of water head, etc. in big cities, this has achieved great successes and benefits.

There are still quite a few urban problems to be solved in China. Some problems are grave. The glaring examples are: the supply of housing and various facilities falling short of the demand of the growth of urban population (including floating population); the growth of motor vehicles and the backwardness of public transport imposing immense pressure on big cities; the quality of urban environment is still sub-standard; new wave of land development surging forward and getting out of control in some areas producing new imbalances; the widening gap between coastal cities and inland (non-advanced area) cities causing new problems; new imbalances taking place among various elements even within the coastal city itself. Owing to the function of the market economy, such as recently shortage in supply of the public welfare housing, water and energy, etc. appears in quite a few cities.

The problems and the challenges that the Chinese urban planners are facing are still serious. We as planners, do not feel slack, happy and relaxed, though so many high buildings, large mansions and grade separation flyovers have been erected in China's cities.

## **POPULATION, LAND, RESOURCES**

Population is the core problem in Chinese, also a key issue for China's cities. The massive scale of population and the structural contrast of population between urban and rural area (approximately 2.6:7.4) have produced an arduous task for China's economy and urban development. The policy of family planning unremittingly carried out for more than ten years has positively acted on the control of population. The recent reported natural growth rate of population, i.e. 1.47% in 1990, has become relatively low among the developing countries. According to the experts' calculation, India's total population will exceed China's some decades later. The natural growth rate of population in China's urban area has continuously been lower than that in rural area. In several big cities, e.g., Shanghai, the natural growth rate is almost close to "zero". The high birth rate that formerly puzzled the cities has already gone, whereas the problem of "aging society" has quietly come "ahead of time". This is the inevitable result produced by family planning. From 1982 through 1990, the aged population in China had steadily increased by an average of 3% a year, the three largest cities, i.e., Shanghai, Beijing and Tianjin, and the two provinces of Jiangsu and Zhejiang have entered the period of "aging society". What would mainly bring the pressure on the cities in a fairly lengthy period from now on is the expansion of floating population.

Based on a non-accurate statistics report, China's floating population has reached more than 50 million a year, accounting for 4.5% of the population of the whole country, for the recent two years. Though the proportion is much lower than that of the developed countries, the absolute quantity makes up slightly more than one sixth of the urban population of the whole country. The floating population was a result of the main flow of population from rural area to cities and towns and from small towns to big cities, which has brought pressure on employment, housing, traffic, environment and various public facilities, etc. Nevertheless, this floating population has given an impetus to the service and trades in great demand in the medium-size and big cities and facilitated the urban improvement of and contributed to the prosperity of urban economy.

The growth rate of China's urban population, in any case, is rather high, which is related to the speed of economic development. This situation will not change until the levels of production and urbanization has been greatly heightened. An inference drawn by the Asian Development Bank, the level of urbanization in Asian Pacific region may reach 50% in the year of 2020 (18% in 1960); the number of big cities with more than 1 million population is supposed to largely increase; by the end of 20th century, the number of big cities with more than 10 million population will have reached 21, among them 12 in the Asian Pacific region, including Bombay, Calcutta and China's Shanghai, etc. with a population of around 15 million.

China's urbanization is basically a process of drawing population from rural area to the cities. The characteristic of which is: the number of big cities and that of small towns increase continuously, while the number of medium-sized cities (with 200-500 thousand people) is at a "transitional stage". The medium-sized cities have constantly been transformed into big cities, hence their absolute quantity and the proportion of which in the urban system have stagnated for several decades. China's urbanization is much related to economic development, and the amount of urban population and its proportion in the population of the whole nation will continue to increase.

The problem of how to distribute the increased amount of urban population, including the urban growths at all levels and the distributions among different regions, is worth studying. Some scholars in China have put forward a strategy of three "alongs", i.e., along the coast, along the Yangtze River and along the main transport routes, and also agglomerated at some bay areas and the deltas of several great rivers. This strategy which is made with good ground.

Land is another important element with regard to China's urban development in the future. Since the beginning of 1980s, the economic value

of land has been recognized by the vast numbers of social strata in China, which is undoubtedly a major event in Chinese economic life. This has initiated new ideas and practices for land use and land management, and has also brought about the reform of urban planning system and method; with the result that a great impact may be exerted upon the structural dynamics and the image of China's cities in the future.

Since the mid-1980s China has lawfully approved that the right to use state-owned land may be sold and transferred; which has greatly changed the system of land assigned gratis carried out for more than 30 years, thus leading to a series of new phenomena and problems. The way to control and manage urban land use, different from what it used to be, has been taken up this adjustment concentrated in urban planning procedure, including laws and regulations, regulatory planning and various other means. The mechanism in this respect is still being improved. Frankly speaking, whether the future development of China's cities can be highly efficient and rational depends to a large extent on the good control and management of the use and development of land.

The resources are the basic support and guarantee of urban development. For several decades, the resources upon which the urban development in China depends have been rather unified, i.e. mainly planned and assigned by the state's. The transformation into of market economy, the policy of reform and opening to the outside world, and the implementation of land leasing system have exerted tremendous influence on the allocation and origin of the resources. The allocation of resources is depended to a large extent on the superiorities, conditions and demands of the cities themselves. The origin of resources may be the various funds from home and abroad, besides state investment and local tax revenue. One of the important sources of funds for urban infrastructure construction is land leasing and transferring by the cities and had reached several billion yuan in 1992. The earnings were already considerably impressive, though it was just beginning. This, too, was one of the important impetuses given to an excess of land leasing by some local governments, which brought about the prevalence of "the fever of encircling land" last year.

## **THE EMERGENCE OF METROPOLITAN AREA**

Big cities in China, like others in the rest of the world, are not only the distribution centres of huge material wealth but also the hotbeds of urban evils. According to statistics, 74% of China's GDP in 1991 was provided by the cities, and among them 50.3% was provided by the big cities (with more than

500 thousand population). The state has to depend on the big cities in order to develop its economy and accomplish modernization. It can be predicted that big cities in China will continue to grow either in scale or in quantity during the process of national economic development. The key issue is to study the development patterns of big cities and try as much as possible to get rid of the evils that possibly occur in the course of development.

A certain number of metropolitan areas have taken shape and emerged in China through the development of more than 10 years. Those generally acknowledged are: the area of Shanghai-Nanjing-Hangzhou, the area of Beijing-Tianjin-Tangshan, the area of Guangzhou-Shenzhen-Hong Kong, and the area of Shenyang-Dalian. The main characteristics of these metropolitan areas are: one big city taken as the dominant factor and also combined with several other big cities to be taken as the core or core axis; the integration of such factors as economy, trade, traffic, environment, and infrastructure taken as a link; and a more comprehensive urban system thus formed in coordination with a series of the small and medium-sized cities and towns, spaced by the separated rural areas, within a certain region (around 20--60 thousand sq.km.). The big cities bring along and rely on the economic development of metropolitan areas and the metropolitan areas further facilitate the economic growth and structural adjustment of big cities. As a matter of fact, these metropolitan areas are becoming the most advanced in the fields of science, economy, and culture. At present, the existing main problems for them are as follows: it is necessary to coordinate the rational development of the economy, population distribution and land use between various cities and towns within the same metropolitan area, to establish the modernized network of regional traffic, and put an end to the worsening of environmental quality.

Take the Pearl River Delta as an example. There are already three big cities in the area of 14,000 sq. km, and a series of medium-sized cities and a large number of small towns in the course of rapid development, such as Zhuhai, Dongguan, Zhongshan, Foshan, and Jiangmen, etc. Since the beginning of 1980s, the primary and secondary manufacturing industries from Hong Kong extensively moving to this area along with the flow of large funds, have brought along and promoted the economic development in cities and towns, and also provided "the juncture" for the upgrading and change of Hong Kong's industrial structure. The urbanization of the delta area is mainly along a continuous development belt along the traffic lines. The urbanization is mainly through the originally weak infrastructure and spontaneous dispersion due to other factors (including the backwardness of management and technology). Therefore, the above-mentioned situation is not favourable for the long-term development in this area (including HK itself). The writer holds

that Hony Kong should care for and support the rational and continuous development in the whole metropolitan area of Guangzhou, Shenzhen, and Hong Kong. The new that the destiny of urban growth of the big city is linked with the metropolitan area is the wisest nowadays.

In recent years, quite a few big cities in China have put forward the goal of "establishing international metropolis" one after another. This is a natural reflection of urban economic development and further open door policy of a big city. Except Shanghai, Guangzhou and Dalian, a group of coastal and inland big cities have also set the goal of "internationalization" in urban planning. This year, Chinese scholars already go more in-depth into this subject. The consensus view suggest that an internationalized metropolis has to be provided with the essential conditions, such as being the hub (or the regional hub) of international trade, finance, and transportation, holding an influential position and playing important role in the world economy, and having the comprehensive urban facilities consistent with the modern standards; all of which are complementary to each other. At present most big cities in China still fall short of the essential conditions. For this reason, some people assume that most of big cities in China should pursue "modernization" first, and then reach "internationalization" eventually. It is believed that big cities which hold an important place in the whole country and equipped with the conditions of superior location, including Beijing, Shanghai, and Guangzhou, will become China's "international metropolis" and rank among the world's most advanced metropolises in a not very distant.

## **THE PEASANTS AND THE SMALL CITIES AND TOWNS**

The main hope for accomplishing the modernization of urban and rural area lies in not only the development of big cities but also the development of small towns and villages. This has been determined by the history and the present situation. For more than 10 years, the number of China's small towns has been increased and also the quality of them improved; with regard to which, the rapidity of development of small cities and towns has not been inferior to that of the big and medium-sized cities. Nowadays, there are more than 55 thousand small cities and towns higher than the level of market town. For them, certainly, imbalance has still taken place in the regional distribution and the level of development. The basic force for the development of most small cities and towns is: a part of "surplus labour" of peasantry has been released from agricultural production and land, and are engaged in township industries, commerce, trade, and other tertiary industries. The tremendous changes have formed the "economic base" for the development of the small cities and towns;

and the peasants' yearning for civilized life after becoming prosperous has been the "spiritual impetus" to urbanization in rural area.

**Two "Typical" Cases : First, Luozhuang Town, the City of Linyi, Shandong Province**

Luozhuang, situated in the inland area of Shangdong province, was a commune in which taking agriculture as the dominant industry during the 1970s. The poor soil and low income demanded that the government to provided relief and subsidies to the local people. Since the reform of rural areas, Luozhuang had developed labour-intensive industries with less investment such as coal mining, ceramics, enamel, and batteries, etc. They adopted the policy of having the products face local market, and introduced advanced techniques from elsewhere (even including the Sino-HK joint-venture industry, the first rabbit woollen mill in Shangdong province). Because of the proper management, the industry has been greatly developed. The implementation of urban construction and the technical level of agricultural production have also been enhanced by use of the accumulated funds. Comparing 1988 to 1972, the gross value of industrial and agricultural outputs of the whole town went up from 3.47 million yuan to 509 million yuan; the value of industrial output already occupied 97% of the total output value; the income per capita was raised from 60 yuan to 1,000 yuan and increased by 15.7 times; the population in town centre increased from 6,000 to 30,000, quite a number of new schools, medical and cultural facilities, and housing were established. A rich small town imbued with dynamic vitality has risen at the foot of Mt. Yimeng Shan which used to be poor.

**Secondly, Longgang Town, Wenzhou City, Zhejiang Province**

This is a new town built by the peasants who raised construction funds by themselves. Longgang used to be a small, bleak and barren fishing village. In 1983, the county of Cangnan directly under the city of Wenzhou decided to set up a town there, because Longgang is located on the banks of Aojiang River with a better channel and good conditions of dock construction. The question of how to raise township population and construction funds was then raised. People threw convention to the winds, such as "peasants cannot settle in the city" and "the city or town construction relies on the government's investment", and adopted the method of "open door policy" to allow peasants from all quarters to come into town so as to set up factories or do various businesses. People also made use of local superiority to develop town's economy, and raised funds from the peasants to construct the housing and

municipal works on the basis of town planning. For the recent ten years, Longgang has already been transformed into a new and prosperous town with the population of around 70,000 from a small fishing village. According to statistics, the governmental investment has only occupied less than 5% of total construction funds. In the field of administration, Longgang has developed its own characteristics and turned the town into a "farmer's town", well-known throughout the country. This kind of "farmer's town" has not only arisen in Zhejiang, but also emerged in many places throughout the country.

The above two examples have greatly inspired us: China's urbanization (the proportion of China's urban population in the population of the whole nation was only 26.2% in 1990) should start from the rural area by transformation into urban area. Only when most peasants become urban population could the high efficiency and modernization of Chinese agriculture be truly realized, and the rationality and balance of cities (including big cities) to a great extent be achieved. This is just as it should be. The urbanization in rural area must depend on the correct policies, on the development of township enterprises and the tertiary industry, on the enhancement of agricultural production and on the initiative of the peasants which is a vast reservoir of enthusiasm because the peasantry pursues good life. This is difficult to be calculated and evaluated by the experts and scholars.

## **CHANCES AND CHALLENGES**

In recent years the greatest chance and challenge the China's urban development has faced, without doubt, is the land. The development of new areas has become a paramount approach to carry out urban development in nowadays China. There are four main types of new development zone: the economic and technological development zone, the development zone of high and new technological industry, the national tourist recreational zone, tariff-free zone. The state already approved more than 70 zones. According to incomplete statistics, nevertheless, the new development zones voluntarily delimited by local authorities in all parts of the country have reached approximately 2000 since last year. Why is the "initiative" so keen? One reason is that the land owners (represented by the local government or the peasants) recognized they may gain funds by leasing or selling land use right, and some land developers (from home and abroad) intend to take chances and challenge the imperfect legal system at present and thus acquire super high profit through land leasing and transferring. The other is that preferential policies may be obtained through these new development zones. This year, the central government already took "severe" measures in order to solve the

problems. Land development would still be the main opportunity for China's urban development if it as well as the related real estate industry could get onto the right track of standardization and legalization. (This is convincing only by seeing the expansion of construction funds, gained through land leasing, and infrastructural scale.) For certain, the strengthening of national economic power, the growing development society, people becoming richer, the progress of science and technology, and more international experiences, all are important opportunities and the favourable conditions for us to be used.

Similarly, it is unquestionable that the great challenge still remains to be faced. Therefore, despite romantic ideas, expectations, aspirations, and a series of good objectives proposed by the urban planners who think over China's cities of 21st century, the practical experts are bound to take the problems, difficulties and anxiety into account: the huge amount of population, the relative backwardness of infrastructure, and the management mechanism of imperfect legal system, etc. These obstacles are all important and likely to be taken up. But the deep-rooted obstacles appearing to be conceptual are easily getting ignored often, especially in a mind "be eager for quick success and instant benefit" enabling a part of decision-makers to treat the long-term interests and public interests with indifference while lacking the thought of "sustainable development". This kind of "short-term activity" is very harmful, because it always looks like "good will" but actually "wrong doing" or "stupid activity". Although the lessons of this kind have been written in many examples at all times and in all countries, people always follow the same old disastrous road. This is sad.

## **CONCLUSION**

In the course of China's transformation into a socialist market economy, the work of urban planning in our country has stood up to all tests. In the light of actual practice, the concept and method of urban planning under the system of planned economy must be changed, among which, it is important to reinforce the mechanism of planning control to guide rational urban development. This kind of mechanism requires an integrated planning system to be taken as support and guarantee. It includes laws and regulations, procedure, method, and of course, advanced technology and measures. We have strived to adjust and perfect the existing system of urban planning to be adapted to the changed conditions.

It is necessary to get coordination, cooperation, and endeavour from all levels and quarters of our society, so as to solve the urban problems in China; for which not a definitely single planner on his own can do. The urban



planning should make clear its own position and role, while moving towards the market economy and diversification; i.e. it should uphold the stand of safeguarding the public interests and the overall interests, and struggle to improve and enhance continuously the quality of urban environment. This is the lofty duty for the urban planners.

## REFERENCES

- CHAO, Ming (1988) (ed.), *China First Peasants' City - Longgang*.
- ECONOMIC DAILY (1993), "The Forecasting of Urbanisation in the Asian and Pacific Region", *Economic Daily*, Aug. 7, 1993. (in Chinese)
- FANG, Lei (ed.) (1991), *The Comprehensive Studies of Land Development Policy in Metropolises*, Shanghai: Shanghai Social Science Academy Press. (in Chinese)
- HAMER, Andrew (1992), "The Management of China's Urban and Rural Lands: Several Problems Raising Up from Establishing of Market Economy", in *The Special Report of the World Bank*, Washington, D.C.: The World Bank.
- INSTITUTE OF URBAN PLANNING THEORY AND HISTORICAL CITY (1990), *The Studies of the Development of Inland Small Towns*, Beijing: China Academy of Urban Planning and Design.
- STATE STATISTICS BUREAU (1990), *1990 Census of China*, Beijing: State Statistics Bureau.
- STATE STATISTICS BUREAU (1992), *1992 China Development Report*, No. 26, Beijing: State Statistics Bureau.
- WU, Liangyong, Ganshi ZHOU, and Zhiqun LIN (1993), "Chinese Construction Industry's Today and Future - The Preview of the Science of Habitation and Environment" (unpublished paper) (in Chinese)
- XU, Xueqiang et al (1988), *The Development and Urbanisation of the Pearl River Delta*, Guangzhou: Zhongshan University Press. (in Chinese)
- ZHOU, Ganshi (1993), "The Problem of 'Aging Society' in China and the Residential Planning for the Elderly People", (unpublished paper) (in Chinese)
- ZOU, Deci (1993), "The Characteristics of International Metropolis Carried in Guangzhou", *Striding Into the 21st Century*, Guangzhou: Guangzhou Press. (in Chinese)



**CHINESE CITIES IN THE  
REGIONAL DEVELOPMENT  
CONTEXT**



## **DEVELOPMENT PROSPECT OF NORTH-CHINA'S COASTAL REGION AND BEIJING-TIANJIN CONURBATION**

*Shunzan YE*

### **STATUS AND ROLES OF NORTH-CHINA'S COASTAL AREAS AND OF THE CITIES BEIJING AND TIANJIN**

The northern China's coastal region comprises three provinces: Liaoning, Shandong, Hebei and two municipalities: Beijing and Tianjin. The region has a total area of 520 thousand sq km (5.4% of the nation's total) and a total population of 207 million (18% of the nation's total, 1992). The region comprises adjoining the parts of the most developed areas of North China and North-East China, embracing Bohai. This Bohai-Sea Rim Region (BSRR) is designated by the State Planning Commission as one of the seven economic planning regions in China. This Region has great socio-economic significance on the northern half of the country. The opening up and development of the Region will produce significant effects on the development of the whole country.

#### **Importance of the Bohai-Sea Rim Region**

##### ***Very Rich Mineral Resources and Solid Base***

The Region is particularly rich in mineral resources as compared to the southern coastal provinces. The reserves of iron ore is 45% and petroleum 40% of the nation's total. The reserve of coal is over 40 billion tons, which is 90% of the total in the whole Eastern Coastal Region of China.

The economy of the Region is well developed. The per capita GNP is 1.24 times that of the national average. Its industrial foundation is solid. Its output

value is 25.8% of the national total. There are many important heavy-industrial bases. The major industrial sectors are iron-steel smelting, fuel and energy production, petro-chemicals, marine-chemicals, machinery and electronic apparatus, building materials and textile industry. Before 1949, it has already had the biggest heavy industrial bases in China i.e.: in Central Liaoning and in Eastern Hebei. Since the founding of the People's Republic, the BSRR has been a major region of the capital investment for developing heavy industries in China. Both Beijing and Tianjin had been the targets of heavy industrial development until 1979. Between 1949 and 1989, capital investment for the heavy industries made up 90% of the total sum of industrial investment in the Region. At present, the output value of heavy industries represent 55% of the total industrial value of the Region, which is higher than that of the national average 6 percentage points. As of 1988, the production of raw-and-processed materials of BSRR represent a significant proportion of national total: pig iron -- 40%, steels -- 37.6 %, soda ash -- 65%, caustic soda -- 37%, crude salt -- 45%, ethylene -- 51%, crude oil -- 41.5%, coal -- 18.0%, electric energy -- 24.6%.

#### ***Locational Importance, Developed Transportation and Communication Networks***

Included in region is the capital city of Beijing, the economic centers of North China, the passageway between south and north of Shanhaiguan (between the native part and the northeast part of the country). There are thoroughfares for the conveyance of the large amount of coal from Shanxi, Shaanxi and Inner Mongolia. It is the hub of the nation's railway system, highway network, telecommunication, air and sea transport.

The Region has the highest density of land transportation network in the country. It is 2.4 times of the national average. The Region has 34% of the total length of double-track railway in the country.

There are more than 100 available sites for the development of seaports of varying scales. Among them, 30-40 deep-water ports can be developed. The 36 ports in use provide a total of 122 berths for over 10,000-tonnage vessels, i.e. 43% of such kind of berths of China are concentrated here. In 1991, the total annual handling capacity of the seven biggest ports of Dalian, Qinhuangdao, Tianjin, Qingdao, Yantai, Yingkou and Rizhao exceeds 200 million tons. The annual total handled volume of all the ports in the region amounted to more than 40% of that of the whole country and the sent volume of the cargo, 60%, the handled volume of import and export cargo, 53% and 53% (export volume of cargo -- 71.1%).

### ***Rich Human Resources and Brilliant Prospects for High-Tech Industries***

The comprehensive scientific and technological strength of the BSRR ranks first in the country with major concentrations in Beijing, Tianjin and Liaoning. Specialists of natural sciences are numbered about 2.31 million -- 24% of that of the national total. Among them, R & D personnel, 550 thousand, i.e, 31% of that of the national total. The number of scientific researchers represents 37% of the national total.

### ***Open Development Areas of Varying Scales Formed***

In 1984, the five cities of Tianjin, Dalian, Qinhuangdao, Qingdao and Yantai have been designated by the Central Government as open cities. Up to now, the opened areas include 16 cities of prefectural level and 57 counties or cities of county level. The total opened areas in the Region consist 1/3 of that in the country. Three provincial capitals Shenyang, Jinan and Shijiazhuang adopt the same policies for the open coastal port cities. Furthermore, there are three tax-reserved zones in Tianjin, Dalian and Qingdao. Besides these, there are Border Economic-Technological Development Zone in Dandong, Tourist-Recreational Development Zones in Jinshitan, Dalian and in Shilaoren, Qingdao.

### ***Having Important Position In North-East Asian Economic Sphere***

Because of its location, population and scale of economy, plus the mineral and human resources, the BSRR occupies an important position in the North-East Asian economic sphere.

### ***Position and Roles of Beijing***

Beijing, Capital of China, is the political, cultural, educational and scientific research center of the country, having extensive contacts with other countries. The Capital has the best developed transportation and communication systems in the country and is the largest hub of land and air transportation. It is also the largest information center in the country.

Beijing, as the Capital, has been a focal place for economic development and urban construction. The GNP of the city was 49.21 billion yuan RMB (1991). Population -- 7.05 million. In terms of economy and population, it is the biggest city after Shanghai. Today, Beijing has developed into one of the comprehensive, solid industrial bases in North China.

Since 1979, the Municipality of Beijing has taken measures to restructure its economy -- actively developing light industries, newly-developing industries and in particular tertiary industries, while restricting the development of heavy industries at the same time. Now Beijing has become

the city with the best developed high-tech industries in China. The production capability of electronic industry of the city takes up 1/4 of the national total. The tertiary industries have greatly developed with output value representing 42.8% of the city's GNP (1991). The percentage is much higher than that of Shanghai (36.5%) and Tianjin (39.0%). The newly developed high level tertiary industries have improved the Capital's urban functions, thus facilitating its economic and international economic activities.

There is a big concentration of scientific and technical personnel, which makes up 1/5 of that of the country. The first-rate specialists in the city are playing leading roles in the scientific-technical fields of the country.

### **Position and Roles of Tianjin**

Tianjin is the largest industrial-commercial port city in North China and is the gateway of the Capital City of Beijing. It has a population of 5.81 million and a GNP of 27.88 billion yuan RMB. The city ranks third in China, in size as well as according to the richness of its human resources.

The hinterland of Tianjin has more than 1 million sq km with a population of 120 million. It possesses 3/5 of the country's total coal resources, 1/6 of petroleum, 1/2 of the deposits of iron ore, 1/6 of the nation's industrial output value (Institute of Geography, 1988). The volume of purchased goods for foreign trade ranks second among the all cities in China (Hu and Yang, 1990).

The Tianjin Port (at Tanggu) has 35 berths, among them 20 berths for over 10,000-ton ships. The biggest berths can accommodate 35,000-ton ships there. The handling capacity of the Port is 25 million tons per year, ranking fifth in the country. The freight volume of the container-transportation occupies the second place in the country. It is the biggest port for external trade with sundry goods. The container wharf is well equipped with wide container yard. It can be used as a bridgehead for "Euro-Asian Transit Bridge" (a railway route). At present, the export and import goods of the Port represent 70.8% of its total handled volume, and this figure renders Tianjin the number one port-city in China.

Tianjin has a good tradition of external trade. The Tianjin Branch of the Bank of China has set up more than 1600 agent banks away from the city and this number is just second to that of Shanghai among Chinese metropolises (Hu and Yang, 1990).

As a matter of fact, the two cities of Beijing and Tianjin are very close to each other -- only 100 km expressway travelling distance apart. The functions of the two cities are beneficial to each other, and they can bring their respective superiorities into better play if they act coordinately and cooperatively. In terms of populations size and of GNP, the conurbation of



Beijing-Tianjin is 1.64 times and 1.27 times respectively of that of Shanghai. The two cities possess 13% of the total number of scientific research institutions and 11% of the total number of the institutes of higher learning in the country. Along the Beijing-Tianjin-Tanggu Expressway, there have been established 6 high-tech industrial development zones, making it the largest concentration of high-tech industries and consequently, the area with the greatest potential for further development in China.

## **CONDITIONS FOR DEVELOPMENT AND PROSPECT OF BOHAI-SEA RIM REGION**

### **The Development Conditions**

Besides the above-mentioned favourable conditions and sound bases for further development of BSRR, it is also necessary to pay attention to the following problems.

#### ***Serious Shortage of Fresh Water***

The per capita water resource is 481 cu m in average for the Region, only 1/5 of the national average. As numerous water-consuming heavy industries are developed here, water shortage is severe in the Region. At present, the shortage is 7 billion cu m per year. In the year of 2000 the annual shortage will reach 23.45 billion cu m which equals to 1/4 of the demand. For the part of Beijing-Tianjing-Hebei Province, the shortage will reach 10 billion cu m.

#### ***Severe Ecological-Environmental Issues***

Numerous industrial cities have witnessed earth subsidence caused by over extraction of ground water due to the shortage of the surface water resources. The area of earth subsidence in Beijing is around 600 sq km.

General speaking, the quality of urban environment in China have been improved in certain degree during the last 15 years. However, the problem is still severe in the cities with important heavy industries, in big cities in Central Liaoning, Eastern Hebei, the belt area of Jinan -- Qingdao railway, and in some mining-processing cities of South Shandong.

#### ***Traffic Overload***

The scale of industrial production, especially the heavy industries and the intensive activities of the dense population have produced a large amount of

traffic in the Region. In particular, enormous volume of coal and petroleum is transported from south to north of Shanhaiguan into Liaoning, the largest energy-consuming province in the country.

At present, the delivered volumes and the turnover volumes of both freight and passengers takes up 28-3% of that of the national total. All railway trunks are overloaded. The railway lines of Beijing-Shenyang, Shenyang-Dalian, Beijing-Shanghai, Beijing-Guangzhou, Jinan-Qingdao have all exceeded their nominal capacities.

### ***Low Level of Economic Structure***

Raw material processing industries still represent a rather high proportion in the industrial structure. During the period from 1952 to 1988, it has increased from 21% to 25.8% of total production, as a result of the over emphasis on the development of heavy industries in the country (Fan, 1992). In Tianjin, output value of labour-intensive industries had increased from 41.1% in 1978 to 45.4% in 1988, whereas for capital-intensive and technology-intensive industries, the value had reduced from 50.5% to 45.7%.

The high level tertiary industries are under-developed in the Region. At present, the total output value of the tertiary industries represent 25% of the GNP, which is 2 percent below the national average.

### ***Difficulties in Economic Restructuring***

With the development of heavy industries, the State have established large and medium-sized state-owned enterprises here, which account for 26.7% of the total number of these types of enterprises in the country. These types of enterprises encounter more difficulties in transforming the management and administration systems. In addition, they are urgently awaiting the renewal of production equipments. For example, the newly developed electronic-optical industry in Tianjin ranked second among all the cities in China in the early years of 1960s, but it lagged and ranked eighth or ninth by the end of 1980s (He *et al.*, 1993). The production equipments of the city had become seriously ageing: among them 25% were installed before 1949, 65% -- in 1950s and 1960s, only 10% were purchased in 1970s and 1980s (Standord Research and Consultancy Institute, 1992).

### ***Rich Land and Mineral Resources In Coastal Area***

It is the particular advantage of the Region in comparison with other coastal regions in China. There are vast unutilized low-lying salinized flat lands and littoral resources with an area of 730 thousand hectares. These lands can be

utilized for industrial, transport and urban development, and various types of agricultural development.

Rich mineral resources: situated in the Region, there are three of the eight largest oil Fields in China: Shengli, Dagang and Liaohe, three of four largest salt Fields: Changlu, Liaoning and Shandong; large deposits of iron ore and coal (in Central Liaoning, Eastern Hebei), gold (in Shandong), magnetite and talcum (in Liaoning) and so on. The output of these raw materials are significant in China.

### **Development Prospect**

The BSRR is facing the circumstance of further opening up its doors to the outside world and the internationalization of its economic activities, and in particular that of intensifying the economic contacts with the countries of North-East Asia. The establishment of diplomatic relations between China and the Republic of Korea has brought about economic co-operation between the two countries. The latter is in turn speeding up the development of its western coastal areas.

China has abundant natural resources and very cheap labour forces (the average level of the salary in the Mainland is 1/20 that of Taiwan, and much cheaper than that in the Republic of Korea) This is particularly prominent in the North than that in the South of China. As the southern provinces of Guangdong, Hainan and Fujian have been opened for development for more than 10 years, the competition between enterprises there has become intense and labour costs increased. For these reasons, the foreign direct investment (FDI) are shifting gradually to the North, where natural resources are richer and the labour costs are lower. During 1984-1991 the proportion of FDI in the Region to the national total had increased from 6% to 12%. The BSRR will become the major open development region in China at the early years of 21st century.

The two neighbouring economic centres, Beijing and Tianjin will merge and be united as a central conurbation for international economic activities. The interregional transport and communication lines will be further developed. Besides the Beijing-Kowloon railway with the spur line from Basian to Tianjin (77 km) which is under construction, some express-railway with speed of 250--300 km per hour between Beijing-Shanghai, Beijing-Shenyang and Beijing -- Guangzhou will be constructed one after another. The expressway Beijing -- Tianjin -- Tang-gu will extend to Shenyang, Shenyang -- Dalian expressway will extend northwards to Changchun, Harbin, Beijing -- Shijiazhuang expressway will extend to Zhengzhou, Wuhan and Guangzhou gradually.

The construction of the railway ro-ro ferry crossing Bohai Strait from Yantai to Dalian will have a great significance for the economic exchanges between North, North-East and East China. The sea route between the two port-cities is 165 km long only. It is 1,440 to 1,810 km shorter than the overland road from Yantai to Dalian. A ro-ro ferry between the two port-cities is already planned with an annual carrying capacity of 4 million tons.

## **Development Strategies**

### ***Economic Restructuring***

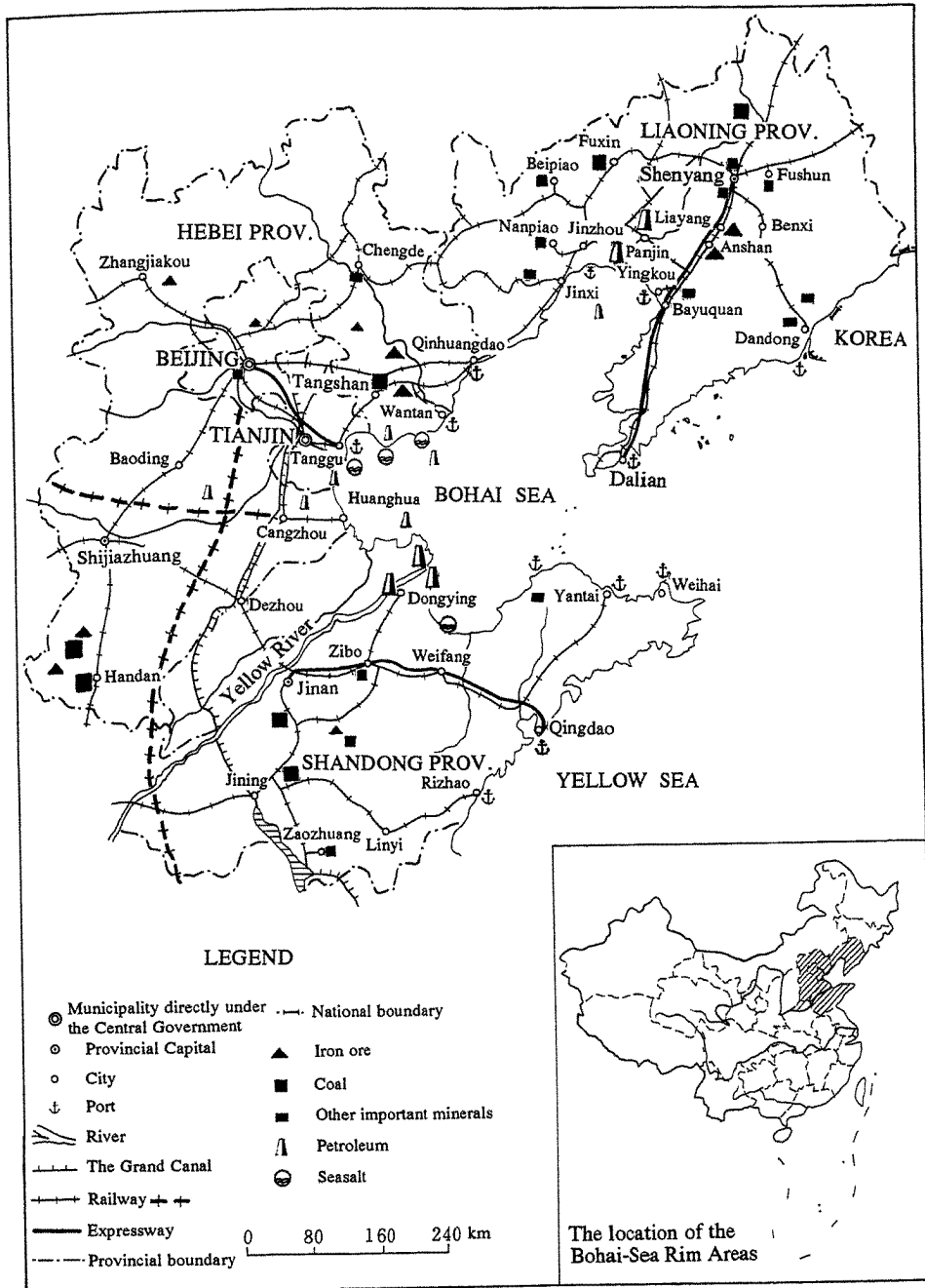
The general goal of the economic restructuring for the BSRR is a further enhancement of its key industries and to maintain its superiority. Agriculture should meet the needs of the economic development as well as the rising demand of the people. The further industrial development should be favourable to the easing of tension of the supply of water, energy and raw materials. Therefore, the newly developing industries and tertiary industries should be developed in faster pace. Thus, the major industries in the Region are: agriculture; energy production; transport and communication; machinery, with auto industry, electronic industry, heavy machinery as its major sectors; metallurgical industry; chemical industry and tertiary industries, with information, finance, commerce and trade, tourism as its major sectors. Among them energy production, machinery and electronic industry, chemical industry and metallurgical industry are the leading ones in the Region (Lu *et al.*, 1993).

The development of high level tertiary industries is aimed at facilitating the enterprises in their internationalization of economic activities, modernization of their business management (including financial affairs, insurance, legal affairs, consultancy service, advertising and publicity product development and market development strategies.)

### ***Expansion of Open Development Zones***

Suggestion : establishing special economic zones like that of Shenzhen and Zhuhai at Tanggu District, Tianjin, Huangdao District, Qingdao, at Economic-Technical Development Zones (ETDZ) in Dalian and Qinhuangdao ---- the integration of port area, ETDZ, tax-reserved zone and financial-trading zone together with special policies. By the above means, it is expected to eliminate the disparity in the opening up and development between the north and south coastal regions in China.

Figure 11-1 Major Cities and Mineral Deposits in Bohai-Sea Rim Areas



***Coastal Area as Priority Area***

That can help easing the problems caused by the over-concentration in urban agglomeration, and using fully the land, mineral and water resources (using seawater instead of fresh water).

***Developing Water-Saving Industries and Cities; Channelling Water From Yangzi River to Serve the Northern China Plain***

The exploitation level of water has been high in this shortage region, over 83% in Beijing-Tianjin-Hebei region. Water re-utilization level in the Beijing's administrative region has reached 82.4%. Measures for water-saving should be taken, for example: installing water-saving devices, developing reused-water supply system, extending the utilization of seawater in both industrial production processes as well as in daily life.

The Eastern Water-Transferring Project is under construction. Water is tapped from the Yangzi River at Jiangdu Pumping Station (with a power of 1,000 cu m/sec) in Jiangsu Province and will be transferred along the Grand Canal to the southern bank of Yellow River. It is necessary to complete the Middle Water-Transferring Project in order to put an end once and for all to water shortage in the Beijing-Tianjin urban agglomeration area. According to the Project, water will be diverted from the Danjiangkou Reservoir at Hanshui River (a big tributary of Yangzhi River) and then from the Reservoir at Three Gorges along the canal at the western side of Beijing-Guangzhou railroad (Liu *et al.*, 1991).

**DEVELOPMENT PROSPECT AND CONSTRUCTION STRATEGIES OF BEIJING AND TIANJIN**

**Economic Base, Characteristics and Goals of Development of the Two Cities**

***Beijing***

Beijing was in the past a large consumption city with very weak modern economy. Since 1949, the economic development of the city has been emphasized by the Central Government at every development stage of the country. Industrial development is always a priority in its economic development strategy. Now, the city has become a strong industrial base in North China with a variety of industrial sectors, well complementing each other locally. The main industrial sectors of the city are: metallurgy, machine

building, electronic apparatus, electric power, auto-making, petro-chemistry, light industries, textiles, food-processing, building materials and medicines. In particular, the petro-chemical, cooking chemical, iron-steel, machine-building (the prominent ones are machine tools, power machinery and other heavy machineries) and electronic industries have great significance in the country.

Since 1979, the Municipal Government has devoted major efforts in developing light industries, restricting the development of heavy industries since practicing the reform and open-door policy. Tertiary industries have got a significant development too. At present the Government put the development of technological-intensive industries as well as high-level tertiary industries as priorities.

The important new industries are: electronic-information industry and industries of integrated electrical machinery, materials and biological engineering. Besides these, auto-industry and communication equipment manufacturing will be developing vigorously too. The food-processing and light industries should be developed with continuous efforts in order to improve the livelihood for the people.

As for the development of the tertiary industries, more efforts should be made in developing information services, consultative service, insurance, real estate, marketing, tourist trade and at the meantime maintaining the development of the traditional commerce and service trades. With a well developed postal and telecommunication service as the base, gradually forming a well equipped and fully functioning tertiary industry system to serve the Capital and the the country as a whole (Chen, 1991).

As for urban infrastructure: the construction of new power stations and transmission system will fully supply power to the whole municipality region by 1995. The majority of newly built-up residential areas will have centralized heating system. Telephone service will reach above 25%, and the environmental quality will be improved.

### ***Tianjin***

Tianjin is a famous modern commercial and industrial city in North China. The volumes of domestic and external trade as well as the industrial output value of the city ranked second in China, just after Shanghai; and surpassed Hong Kong and Singapore in South-East Asia before 1949 (Standford Research and Consultancy Insitute). During the first 30 years of the socialist construction, the trading centre functions of Tianjin had declined, whereas the function of a comprehensive industrial base had been enhanced as a result of State policies. But it has remained an important trading city throughout the

period. In 1980 the trading volume of import and export goods accounts to 12% of the total of the country, the third among all cities of the state (Institute of Geography, 1988).

Since 1949 Tianjin has developed a comprehensive industrial system on the basis of textile and light industries. The main sectors of the comprehensive industrial system are : light industry, textile, chemical (including basic and petro-chemical ones), petroleum, electric power, machinery, electronics, black metallurgy, building materials. The industrial development from now on will enhancing the comprehensive industrial base with advance technology, with petro-chemical and marine chemical industries, electronic industry, auto-making and machinery as the leading industries for the city's economic development, while maintaining the superiority of its textile and light industries.

The general strategy of the city's development is to develop the city as an economic metropolis, functioning as a financial and trading center in North China, with the presence of foreign banks, international stock market, a center of foreign exchanges and settling accounts, well developed economic, educational and scientific technological bases and some special tertiary industries to support commercial activities such as financial, insurance, transport and communication, market analysis, technical-economic analysis, software services and etc.

As for urban construction, besides improving the infrastructure and the quality of the urban environment, the realignment of the functional industrial zones should be realized as follows:

- 1) In the central zone of the city, financial, trading, information services and other tertiary industries are taken as the dominant ones.
- 2) Along the lower reaches of Haihe River: iron-steel industry and other heavy-chemical industries.
- 3) Along the express way: high-tech industries.
- 4) In the coastal area (Tanggu) export-oriented processing and international trading.

### **Cooperatively Develop Central Conurbation For The International Economic Activities**

With the general growth in internationalization and regionalization of economic activities, the economy of the BSRR will in increasingly internalized. Naturally, Beijing and Tianjin, the two largest cities of the Region will become the centre of international economic activities in North China. They are in parallel with Shanghai in East China and Hong Kong and Guangzhou in South China.



To compete in the international economy, these cities have to built up their economic strength, and strengthen their economic connections with the markets of the Region, the country and the world.

The centre for international economic activities in China should have the following attributes: (1) Having a strong economic-technical base including high-standard tertiary industries, developed international trading and financial service and knowledge-intensive industries; (2) With high urbanization level, especially in city construction with advanced transport and communication system and other urban infrastructure; (3) Occupying advantageous locations and having a well-known trading port; and (4) Having economic-technical development zone, finance center or free-trading zone.

Beijing and Tianjin are both qualified in general for being the central cities for international activities in world regionalization, but they each have own advantages and disadvantages.

In general, the economic-technical base of Beijing is better than Tianjin; but Tianjin is more developed than Beijing in international trading and finance. The personnel of Tianjin have better quality in skills and management, rendering its enterprises more economic efficient than those of Beijing. And the science-tech industrial park of Tianjin is the most successful among the 27 State defined science-tech industrial parks (Stanford Research and Consultancy Institute, 1992).

As for the general level of urban construction Beijing exceeds Tianjin. But the large scale urban infrastructure of Tianjin, realised in the 1980s, is far from being fully utilized, for example, the new passenger railway station. The two cities each have its own strength in external transport system. Railway and highway transportation are superior in Beijing. But Tianjin has a large sea port, which Beijing doesn't have. The annual handling capacity of Tianjin Port will be increased to 52 million tons. There is a largest container wharf in North China. Its land area has a breadth over 1 km. The volume of the annual handling capacity of sundry goods ranks second in China. The transport capacity of Beijing Airport ranks first in the country. The volume of the annual passenger traffic of the Airport, being under extension now, will reach to 32 million person trips by the year of 1997. The Tianjin Airport is an alternative to the Beijing Airport. It is the largest air port for freight transport in China and having an annual capacity for passenger traffic at 6 million person trips. However, at present the utilization ratio of the Airport is lower than 3% (Stanford Research and Consultancy Institute, 1992).

Tianjin has the location of the largest seaport, which Beijing does not have. But Tianjin is not as well-known as Beijing.

The situation of ETDZ and other free trading development zones together with the potential of the financial market in Tianjin is better than that in

Beijing. Beijing, on the other hand, has the first developed high-tech industrial parks in the Region.

As can be seen, the two cities can be complementary each other with their own respective superiorities. If they function integratively, a very strong conurbation for international economic activities can be formed. The development strategy of the two neighboring metropolises should be at the same time competitive as well as cooperative, making it mutually beneficial to each other.

For making the two cities as an integrated area for international economic activities, it is necessary to further develop the transport and communication networks. The distribution of urban areas along the main communications artery between the two central cities needs to be well designed.

Along newly built 143km Beijing-Tianjin-Tanggu Express way a belt of high-tech industries zones is taking shape. The industries are mainly oriented for international trade. They will play an important role in transforming the traditional industries and in restructuring the economies of both Beijing and Tianjin and in bringing along the development of township enterprises. Now almost near every one of the nine approaches to the Express way, high-tech industrial parks have been set up. The expected scales of every high-tech industrial park are of 100-250 thousand people and 2-5.6 billion yuan RMB of output value in the near future, and in the future -- 150-400 thousand people and 7.5-20 billion yuan RMB. There would be financial and commercial institutions, residential areas, developed transport and communication systems and other urban infrastructures. Thus, the development belt along the Express way would become the most vigorous growth axis in the Beijing-Tianjin region (City Planning Bureau of Tianjin Municipality, 1993).

### **Jointly To Develop Coastal Area**

The coastal area -- Tanggu District is the place where Tianjin Port locates. The area has an land area of 683 sq km. It is more than double the size of Pudong area in Shanghai. In recent years many domestic and foreign scholars appeal for the development of Tanggu District according to the Pudong model (Lu *et al.*, 1993; Li, 1993). The former has four advantageous conditions in comparison with the latter: (1) Having large port facilities, old industrial area, financial and trading area, and newly developing areas such as ETDZ, tax-reserved zone and etc. The starting point of the development of Tanggu is much higher than that of Pudong. (2) Having large amount of uncultivated land (120 sq km) and littoral resource (370 sq km), thus the possibility of filling up the littoral and creating land. (3) It is a sparsely populated area, having great environmental capacity for dealing with industrial wastes. (4)

Having rich natural resources such as oil and gas, sea salt and geothermal energy for exploitation.

Joint development of the coastal area and coordinate development of the two cities should conform to the development strategy of the two cities, with Tianjin as Beijing's seashore gate and an auxiliary economic center. Tianjin plays an un-replaceable supplementary role for the Capital through its large-scale international economic activities and its advantageous position of external transport. In short, the development of the two cities should be complementing each other.

## REFERENCES

- CAO, Yong (1993), *The International Economic Cooperation and the Development of the Extroversion Economy in Bohai-Sea Rim Region, Striding to 21st Century* (Manuscript). (in Chinese)
- CHEN, Xitong (1991), "The Grand Targets and the Honour Mission -- Prospects of Beijing for the Year of 2000", in XINHUA NEWS AGENCY (ed.), *China's Development Blueprints: 1991-2000*, Xinhua Press House, pp.311-318. (in Chinese)
- CITY PLANNING BUREAU OF TIANJIN MUNICIPALITY (1993), *The Study for the General Development Planing of the High-Tech Industrial Belt Along the Beijing-Tianjin-Tanggu Expressway* (Tianjin section) (Mimeograph copy).
- FAN, Jie (1992), "The Macroeffect of Natural Resources Structure on the Evolution of Regional Industrial Structure -- Take the Area Surrounding the Bohai Sea as an Example, *Journal of Natural Resources*, Vol.7, No.2, pp.97-105. (in Chinese)
- HE, Zhongxiu *et al.* (1993), "A Study on the Economic Development of Bohai-Yellow Seas Rim Region (part of Tianjin), in KONG Deyong (ed.), *The Studies on the Economic Development of Bohai-Yellow Seas Rim Region*, Beijing: China's Science-Technical Press, pp.258-296. (in Chinese)
- HU, Xuwei and Guanxiong YANG (eds.) (1990), *China's Coastal Port-Cities*, Beijing: Science Press, p. 40. (in Chinese)
- INSTITUTE OF GEOGRAPHY, CHINESE ACADEMY OF SCIENCES (1988), *The Economic Geography of Beijing-Tianjin-Tangshan Economic Region*, Tianjin People's Publishing House, pp.194, 188. (in Chinese)
- LI, Shisen (1993), "A discussion about the development strategies of whole Bohai-Sea Rim Economic Region and of Tianjin Municipality", *Bulletin of the Social Science Association of Tianjin*, Vol. 2, pp. 1-2. (in Chinese)

- LIU, Guangwei *et al.* (1991), "The Projects for Transferring Water from South to North in China, *Geographical Knowledge*, Vol. 10, pp. 6-8. (*in Chinese*)
- LU, Dadao *et al.* (1993), *The Overall Development and the Comprehensive Tackling Measures for the Bohai Sea Rim Region* (unpublished manuscript). (*in Chinese*)
- STANFORD RESEARCH AND CONSULTANCY INSTITUTE (1992), *Tianjin Under Transition - Striding to Further Market-Oriented Economy*, U.S.A., pp. 14, 31, 33, 66. (*in Chinese*)

# 12

## **DEVELOPMENT OF SHANGHAI AND THE YANGTZE DELTA**

*Gonghao CUI*

Generally speaking, the Yangtze Delta includes seven cities in Jiangsu Province (Nanjing, Zhengjiang, Yangzhou Suzhou, Wuxi, Changzhou and Nantong), three cities in Zhejiang Province (Hangzhou, Jiaxing and Huzhou), together with Shanghai, totalling eleven cities, covering 62,000 square kilometres with a population of 54,000,000. (1990)

### **DEVELOPMENT OF THE YANGTZE DELTA**

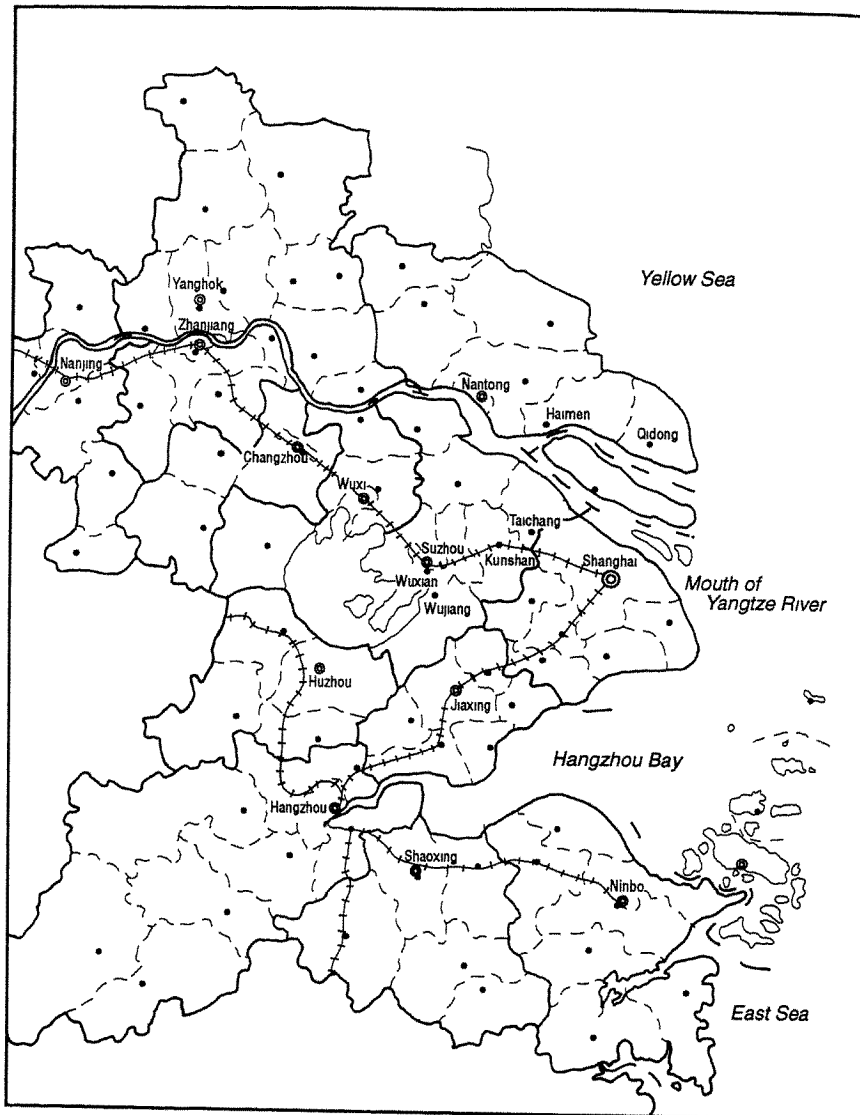
The Yangtze Delta, centred around Shanghai, is the nucleus of the national economy and one of the most developed regions in China. It has only 5.4 percent of the national population and 0.84 percent of the total land area, but it generates (Figure 12-1) 19 percent of the industrial product, turns over 19.3 percent of the total profits and taxes. The regional average industrial product per capita is two times the national value. The regional average GDP and the industrial product per square kilometres are 7 and 20 times of the national figures respectively.

Since the 1990s, Shanghai and the Yangtze Delta have entered a new era of development. It will, therefore, be very meaningful to review their progress in the past four decades, project into their prospect and examine the possible problems that may arise.

In the past four decades of the Peoples' Republic, the Yangtze Delta has grown into a comprehensive industrial base characterised by coordinated development of light and heavy industries, with processing industry forming the main part of the system. The light industries generate more than 60 percent of the total industrial product, makes up 23 percent of the national total light

industrial product. A comprehensive transport network consisting of mainly water courses and roads has been formed here. Half of the total freight volume is transported by water. An urban system has emerged, being composed of cities of various scales. In this region, there are three extra large, three large, six medium, fourteen small cities and several hundred small towns.

Figure 12-1 The Yangtze Delta



However, in view of their history of prosperity, their natural endowment and the growth rates of other provinces, Shanghai and the Yangtze Delta have not been developing rapidly enough. (Table 12-1) Relatively speaking, the Jiangsu and Zhejiang provinces have taken up speed in the 1970s and 1980s with the flourishing of township enterprises. But Shanghai has long been below the national average with respect to growth rate.

**Table 12-1 Growth Rate of Industrial Product in Selected Provinces**

	1953-1989	1953-1978	1979-1989	1981-1989
Beijing	11.6	12.7	8.9	8.6
Liaolin	9.9	10.0	9.7	10.0
Shanghai	9.2	10.1	7.2	7.1
Jiangsu	13.2	11.7	17.2	17.1
Zhejiang	13.6	10.7	20.7	20.1
Fujian	13.0	11.3	16.8	17.8
Fubai	12.6	11.9	14.4	13.8
Guangdong	12.7	10.6	17.8	20.0
Sichuan	1.8	11.8	1.6	10.2
Shanxi	12.8	13.7	10.7	12.2
<i>National Average</i>	<i>11.7</i>	<i>11.4</i>	<i>12.4</i>	<i>13.2</i>

Source: Huang, Tianhua (1993)

The slow growth was attributable to a number of factors. For a long time, the national emphasis for regional development has been tilted toward the middle and western parts of China. From the First "Five-Year Plan" (FYP) to 1970s, more investment on infrastructure was directed to the inland than to the coastal area. (Table 12-2)

Talking about the coastal area, in the 1950s, because of the location of natural resources and the proximity to the former U.S.S.R., industrial investment was put mainly in the north. After the 1980s, the policies of reform and open-door were adopted by China. Thus, the southern coastal area, such as the Pearl Delta, Guangdong and Fujian, etc, became the prioritized region. However, the Yangtze Delta (especially Shanghai) has long been put in an inferior position (Table 12-3).

For a long time, Shanghai, as one of the old industrial base, has been in a situation of low input but high output in order to support other regions. From

**Table 12-2 Spatial Distribution of National Investments on Capital Works According to FYPs (%)**

	1953-1957 1st FYP	1958-1962 2nd FYP	1963-1965 Adjustment	1966-1970 3rd FYP	1971-1975 4th FYP
Coastal Region	41.8	42.3	39.0	41.0	40.0
Inland Region	43.8	53.9	38.2	52.7	41.7

**Table 12-3 Change of Position of Industrial Product of Coastal Regions (%)**

Year	Shanghai	Liaolin	Jiangsu	Guangdong
1981	11.89	8.72	8.99	4.89
1990	6.89	6.27	11.55	7.96
1981-90	-5.60	-2.45	+2.56	+3.06

1950 to 1980, the national investment on infrastructure was about 700 billion Yuan. Shanghai shared only 3.4 percent of the national total. On the contrary, since the 1960s, the revenue turned over by Shanghai was one sixth or one seventh of the national total. Further, since the 1950s, many factories and workers have been relocated to the inland region to support development there. For instance, during the period of 1956 to 1960, 467 factories and more than 20,000 workers moved out.

Under the circumstances of economic reform, the growth of the State-owned enterprises was deterred by their lack of vigour and disruption of low price material supplies subsequent to radical changes in the allocation system. State-owned enterprises take up a large proportion (61 percent in 1992) of the total industrial product of Shanghai. But in other coastal provinces, such as Guangdong, this share is only 30 to 40 percent. The share of township and village enterprises in Jiangsu Province was more than 50 percent of its total industrial product (especially in the lake area of Taihu in the south of Jiangsu and north of Zhejiang, it takes up 70 to 80 percent of the regional total). All the above factors reduced the growth rate of Shanghai. At the same time, Guangdong Province took full advantage of the available foreign capital and



was able to develop rapidly. In 1990, the actual amount of foreign investment in Guangdong was 13.7 percent of the national total.

Summing up, the position of Shanghai as the number one city in the country has been erode. The market share of Shanghai products has been greatly reduced. In the domestic market, Shanghai products have been displaced by north 'invading' Guangdong products. On the other hand, Shanghai's share in the national export has steadily declined since 1978. In 1978, the proportion was 27.9 percent, declining to 12.3 percent in 1985 and 9.6 percent in 1989. But in Guangdong, the volume of import and export was already equal to the sum of Shanghai, Jiangsu and Zhejiang in 1989.

Shanghai is facing severe challenge and pressure. It has to compete with the coastal areas outside the Yangtze Delta, like the Pearl Delta in the south and Bohai Rim in the north. At the same time, the Suzhou-Wuxi-Changzhou area within the Yangtze Delta is increasingly out-going. They are scrambling for markets with Shanghai. So the development trend of Shanghai and the Yangtze Delta must be adjusted, not only for the benefit of the region but also for the whole country. Therefore, it is an opportunity and a correct choice for Shanghai and the Yangtze Delta to take the opening up of Pudong as their juncture to reassemble alliance to form new development trend.

## **RECENT CHANGES OF THE YANGTZE DELTA**

In the 1990s, China has entered a new stage of open-door and reform. The Yangtze Delta has become the focal point in the national development programme. It underwent great changes and emerged in a new style in the past two years.

### **Accelerated Development in Pudong, Enhanced Role of Shanghai as Focus**

In 1992, Pudong, a district of new development in Shanghai, being 350 square kilometres in area (5 percent of the total area in Shanghai) with a population of 1.33 million (10 percent of the city total), generates an industrial product of 30.7 billion (more than 15 percent of the total in Shanghai). The sales volume in the district was 30.4 billion, close to the value of Shenzhen (a Special Economic Zone).

The development in Pudong is primarily export-oriented . Up till December 1992, 539 foreign participating enterprises have been approved and the committed foreign investment amounted to 1.2 billion US Dollar. Land leasing is an essential measure for the development of Pudong. Until August 1993, 137 land leases have been granted, 44.5 percent of which was for

industrial uses, 29.2 percent for commercial and trading purposes. Leased area amounted to 2.5 square kilometres, 59.5 percent of which was for industrial uses, 16 percent for commercial and trading purposes. Further, about 1,700 enterprises were set up in Pudong by the central or various provincial governments with a total investment nearing 12 billion Yuan.

The atmosphere of investment in Pudong was improved significantly in the past two years. Nanpu-Bridge and Yangpu-Bridge were built. Gaoqiao tax-free zone was set up. Physical infrastructure was taking shape quickly in the district.

The short term goal of Pudong development is to transform the district into an industrial base for imported technologies and a major financial centre for the entire Yangtze catchment and the eastern part of the country. In the long run, it will become a centre of an internationalised, open economy in the west Pacific region.

In Puxi Area of Shanghai, the existing physical infrastructure and industrial setting are undergoing large scale re-structuring. The process is particularly drastic at the city centre. Urban renewal is being achieved through redevelopment along the famous Nanjing Road. According to statistics, more than 4 million square metres floor area of old buildings was demolished from 1991-1993. This was equal to the cumulative total of the preceding 20 years. Approximately 300,000 people have moved out of the city centre in these years.

Shanghai is the centre of the Yangtze Delta. It has prolonged and close economic and social ties with the surrounding cities and counties. Only by means of coordinated and cooperative efforts with them has Shanghai been able to develop. Nowadays, many cities and counties in Jiangsu and Zhejiang provinces are adjusting their industrial structures and development trends to strengthen their linkage with Shanghai. High technology, light industry, textile industry and tourism are very prominent in the regions of Suzhou-Wuxi-Changzhou and Hangzhou-Jiaxing-Huzhou. In Nanjing, Zhengjiang and Yangzhou, taking the advantage of easy transportation enabled by the Yangtze, heavy industries such as petroleum, metallurgy, building materials and automobile are being developed. Together with Shanghai, these regions have developed into a comprehensive industrial base of national importance. The river port of Nantong and the harbour ports at the Gulf of Hangzhou have emerged with Shanghai to form an important port cluster.

Jiangsu and Zhejiang provinces in the Yangtze Delta have always been under strong influence of the economy of Shanghai. They rely heavily on the technologies, capital and human resources imported from Shanghai; at the same time, they form an integral part of the prosperity of Shanghai. For instance, 54 percent of the township enterprises in Suzhou are closely

connected to Shanghai. Kunshan development zone actually started off under joint venture with Shanghai. At present, in order to take full advantage of the potential and policy preference of Pudong, the six counties within 40-60 kilometre radius from Shanghai, including Kunshan, Taichang, Wujiang, Wuxian, Qidong and Haimen, are planning to form a semi-circular development zone centred at Pudong, to enhance connection with Shanghai. These counties have more than 5,000 industrial enterprises, two third of which are linked up with factories, research institutens, universities or colleges in Shanghai in one form or another. Nowadays, one third of the consumer products or textile products in the market of Shanghai are made in these counties. Besides, a concept of cooperation called "Shops at the front and factories at the back" has been formulated between Kunshan and Pudong, that is to say, all the downstream operations such as packaging, shop display, export, tourist promotion, etc. will be located in Pudong; the upstream operations such as materials supplies, tourism logistics, etc. will be carried out in Kunshan. Thus common development can be achieved through mutual cooperation. Further, much foreign investment was absorbed from Pudong to Wuxian. More than 200 joint ventures were established there.

In a word, a closely linked network is being formed around Shanghai in the whole Yangtze Delta.

#### **Implementation of New Transport Network Planning and Construction consisting of Modern High Speed Systems and North-south Links across the Yangtze centred around Shanghai**

Low traffic capacity is a severe restriction to the development of the Yangtze Delta. Taking the example of railway, the most popular transport means in the region, there was hardly even one kilometre of new railway built in the 40 years since "Liberation", no electrified railway until now. For more than half of the railway lines in the region, the utilization rate exceeded 80 percent. 46 pairs of passenger trains are scheduled every day between Nanjing and Shanghai. If freight trains are included, there will be over 100 pairs. Therefore, construction of transport facilities is the key to the development in the Yangtze Delta. As Shanghai is the main source of traffic generation in the region, transport planning should be focused around Shanghai. Under the current planning, future east-west corridors include the Shanghai-Nanjing, Shanghai-Hangzhou and Hangzhou-Ningbo expressways, Xuzhou-Nanjing-Shanghai dedicated high speed passenger railway, Shanghai-Chengdu (capital of Sichuan Province) national highway, Nanjing-Nantong Railway, Nanjing-Xiangfan (in Hubui Province) Railway, widening of Southern Jiangsu Canal, Hefei-Wuhu-Xuancheng (all in Anhui) and Hangzhou Railway (to be built to divert traffic from Shanghai-Nanjing and Nanjing-Hangzhou railways) and a

new canal is contemplated from the sea port of Lusi to the new estuary of the Yangtze. With respect to the north-south corridors, as the Yangtze Delta lies at the heart of eastern China, it becomes a key to the connection between the north and south of the country. However, all the north-south links are cut by the Yangtze. Now, besides the Nanjing-Bridge, there are only seven vehicular ferries crossing the river. In 1992, the daily traffic flow was 43,000 vehicles, among which over 30,000 passed through the Nanjing-Bridge, exceeding the original design capacity. Traffic congestion on the bridge and the seven vehicular ferries is very severe. Solution to the north-south traffic problems is crucial to the economic development in the region. According to the plan, several passageways are going to be built such as Jiangyin Yangtze Bridge (under construction), Zhenyang Bridge, second Nanjing Bridge, Nantong-Shazhou Tunnel, Chongming-Haimen Bridge (under feasibility study). After these passageways are built, the traffic in the Yangtze Delta will be greatly improved.

In addition, there are other important new north-south links such as railway from Xingyi (in north Jiangsu) through Jiangyin to Changxin (in Zhejiang), training of Beijing-Hangzhou Canal and a number of national highways.

Subsequent to the implementation of the above-mentioned plans, a circular transportation system consisting of waterways, railways and highways will be formed in the Yangtze Delta.

The construction of airports in the Yangtze Delta is an important sign of economic development and escalation of regional importance. The existing large airports in Shanghai, Nanjing and Hangzhou; together with the medium-sized airports in Nantong, Wuxi, Changzhou, etc., are far behind the needs of the development. Therefore, it is imperative to expand old airports and build new airports as part of the transport improvement plan. The construction of new Nanjing International Airport, the Pudong Airport and the expansion of Shanghai Hongqiao International Airport have already been included in the development programme.

### **Industrial and Spatial Restructuring in the Yangtze Delta Characterized by Formulation of Industrial Belts and Construction of Development Zones.**

At present, the development axis in the Yangtze Delta is concentrating around the Shanghai-Nanjing Railway and the Southern Jiangsu Canal, forming an industrial belt with several large or extra large cities including Nanjing, Changzhou, Wuxi, Suzhou and Shanghai as its nuclei. Now, the development of the Yangtze Delta is advancing northward and eastward, towards the river

and the coast, integrating with utilization of the banks of the Yangtze, especially the construction of deep river ports, exploitation of new water sources and the development of small and medium cities. The total length of river banks of the Yangtze is 910.6 kilometres (487 kilometre on the south), 53 percent of which is of deep to medium deep water. Up to now, 107 kilometre river bank has been used. 123 kilometres more can be developed in the near future. Good quality river bank can provide favourable conditions for the development of ports, power stations, cities and towns. At present, there are 6 open river/sea ports along the Yangtze. The large power stations located in Waigaoqiao of Pudong, Changshu, Ligang, Nanjing, Nantong, etc., are going to be built or expanded. Total installed capacity of these stations will increase to 16,000 MW around the year 2000. A number of new fashion cities and towns will emerge in the proximity of these new ports and power stations. Thus, a development zone will be formed along the course of the Yangtze. This zone will combine with the Shanghai-Nanjing Railway and the Southern Jiangsu Canal to form a new corridor of industrial cities. Together with the Shanghai-Nanjing-Hangzhou Railway and the high speed roads, the major development axis and conurbations in the Yangtze Delta will be formed.

Recent development of the Yangtze Delta is characterized by the construction of development zones. At present, there are 7 national grade high technology development zones in the Yangtze Delta, being one fourth of the national total approximately. Also, there are several economic-technical development zones, environmentally protected industrial zones, scenic spots, some provincial grade development zones and township industrial parks, constituting a multi-tier system of new economic growth poles. The development zones play a positive role in attracting foreign investment, importing technologies and rationalizing distribution. For instance, there are over 200 enterprises, 100 research institutes and colleges in the high-technology development zone (torch zone) in Suzhou, Wuxi and Changzhou, with a population of around 100,000. Of course, there are also problems related to the development zones, such as excessive in numbers and land occupation, vague projects, insecure funds and slow progress in the development process. However, all these problems are being solved gradually.

### **New Stage of Integrated Urban-Rural Development and Regional Urbanization in the Yangtze Delta Consisting of Coordinated Expansion of Large Cities and Construction of Small Towns**

In the 1990s, China is witnessing a new 'leap-forward' period of economic growth. In line with this, new plans for various types of cities in the country are being prepared on the grounds of implementing the previous plans in the

past decade. Viewing from the general trend, the large cities in the Yangtze Delta are planning to expand into metropolitan areas. Shanghai is planning to extend its metropolitan area to 2,057 square kilometre, with 1,000 square kilometre being urbanised, constituting a Metropolitan Ring with the suburb counties. Nanjing presents in its new master plan a 2,000 square kilometre Metropolitan Ring as a new spatial scope and room for future expansion. A new CBD will be built at the eastern end of the city. The urban area will extend southward to the new international airport and northward across the Yangtze. The expansion of Suzhou will be more typical. Around the old city, a new industrial city (about 20 square kilometre in area) began to develop in the mid 1980s. To the immediate south is the new Waxian county-town (about 20 square kilometre in area). In the near future, a new industrial park (about 70 square kilometre in area) undertaken by a Sino-Singaporean joint venture will be set up. The extended area is more than 5 times of the old city. Similarly, the urban areas of Wuxi, Changzhou have been enlarged because of relocation of the county-towns. Hangzhou is planning to extend beyond the river, Qiantangjiang.

The small towns have been strengthened with the development of county-level economy, particularly the township enterprises, as the backbone. In 1992, 6 of the top 10 of the 100 Outstanding Counties in the country were found in the Yangtze Delta, the first three places were all in southern Jiangsu. Wuxi, the champion county, generates more than 30 billion Yuan of industrial product, much higher than the total in some provinces in the western part of the country. Subsequent to the adjustment and concentration of township enterprises, the small industrial park construction puts the small towns into a new development stage. The Yangtze Delta has already had 988 designated towns and a large number of market towns in 1992. On average, there is a town in every 26 kilometres. Besides, because of the development of village-owned enterprises, some villages output more than 100 million Yuan in a year. Concentration of industry and residence is taking place in these areas through the process of new rural area planning and construction.

The synchronised development in the urban and rural areas in the Yangtze Delta can be reflected in the ratio of national income per capita between the city proper and the surrounding suburb counties (Table 12-4). The ratios of Shanghai and Suzhou-Wuxi-Changzhou were the smallest, showing that rural economy has developed to a rather high level in these areas.

Of course, there are still variations among the counties in the Yangtze Delta. Apart from Shanghai, the region can be roughly divided into three grades: Suzhou-Wuxi-Changzhou, Hangzhou-Jiaqing-Huzhou, Ningbo-Zhengjiang-Yangzhou-Tongzhou, among which the Suzhou-Wuxi-Changzhou takes the lead.

**Table 12-4 Contrast Between Per Capita National Income of City Proper and Suburb County**

City	Per Capita National Income in the City Proper (I)	Per Capita National Income in the Suburb County (II)	I/II
Beijing	3,878	2,164	1.79
Shenyang	3,296	1,166	2.83
Wuhan	3,030	1,228	2.46
Guangzhou	4,535	1,989	2.28
Harbin	2,426	959	2.53
Chongqing	2,291	869	2.63
Xian	2,190	640	3.42
Daling	4,456	1,291	3.45
Changchun	2,222	753	2.95
Chengdu	2,316	941	2.46
Jinan	2,842	1,222	2.32
Lanzhou	3,083	699	4.11
Shanghai	5,197	3,379	1.38
Wuxi	5,090	2,633	1.93
Suzhou	4,285	2,671	1.60
Hangzhou	4,440	1,895	2.34
Nanjing	3,515	1,183	2.97
Qindao	3,340	1,436	2.32

### CONFLICTS AND PROSPECT IN THE DEVELOPMENT OF THE YANGTZE DELTA

- 1) "Spatial Crisis" - shortage of land is the most serious problem faced with the development of the Yangtze Delta. The Yangtze Delta was already densely populated. The population density is 7,108 person per square kilometre. The cultivated land per capita is only about one Mu (approximately 660 square metres). In urban areas, the situation is more critical. The population density in Shanghai is 43,000 person per square kilometre. However, as more job opportunities and more favourable living conditions could be found in the urban areas, a large number of immigrants were attracted to the cities. The floating population in Wuxi ranges between 300,000 to 500,000, coming from 27 provinces and autonomous regions. Nanjing contains more than 200,000 temporary

inhabitants. The floating population in Shanghai is more than 1.5 million. At the same time, more and more cultivated land is being occupied by construction works. According to statistics, the towns in Suzhou-Wuxi-Changzhou had taken up 25,000 hectares of land from 1954 to 1988. In 1992, the land-occupation rate has accelerated because of the "development zone fever". Now, in Suzhou, 110 among the 116 townships are building industrial parks.

The "Space Crisis" is becoming more and more acute as a result of increase in population and decrease in available land.

- 2) "Environmental Crisis" - being closely connected to the "Spatial Crisis", environmental degradation in the Yangtze Delta, with its high density of population and economic activities, was deteriorating day after day. Other than over-exploitation of land, the problems of water shortage and water pollution were very serious. As a result of excessive extract of underground water for urban construction and industrial development, the water table is constantly drawn down, leading to serious subsidence problems. In particular, in the Suzhou-Wuxi-Changzhou area, the cumulative subsidence since the 1950s is more than 1 metre. The extent of area with over 300mm subsidence is larger than 1,300 kilometres. At the same time, decentralisation of township enterprises has aggravated the problem of environmental pollution. In the south Jiangsu-Taihu area, 23 percent of the overall cultivated land has been polluted by industrial wastes to different degrees. Surface water within the area is basically non-potable.
- 3) Lack of Unified Planning - Each city, county, town or village in the Yangtze Delta possesses considerable economic strength. Under the market system, the governments at different levels steer their courses of economic growth and infrastructure development according to their own interests and objectives. This leads to the phenomena of scattering and localisation of township enterprises, similarity of industrial structure, scattering and low level repetition of construction. Factories of various sizes scattered around vast rural area, importing similar equipment and making similar products. Economy of scale and effective division of labour cannot be achieved. Therefore, both the sales of products and economic efficiency are far from ideal. Independent planning and disorderly development are often found in the course of township development. Every small township or even village constructs its own small but comprehensive public facilities, of very low standard and low



utilization. An urban network with suitable hierarchy and coordinated development is unable to take shape.

In the next 10 years, especially before 2000, the Yangtze Delta, centred around Shanghai will enter an important stage of economic and social development. The region has attracted the attention of both the government and the academic circles. At present, two major programs about the development of the cities and towns in the Yangtze Delta, sponsored by the National Science Foundation, is being proceeded by the geographers and planners respectively. The central government has also organized several research programs about the development strategy of the Yangtze Catchment and Delta. In general, the characteristics of the development in the Yangtze Delta can be summarized as follows:

- 1) Pursuing the objectives to converge with international practice and to develop into the most affluent region in the country, Shanghai is aiming at developing tertiary sector such as finance, information and real estate industries in order to reset its central position in the Far East. Other major cities in the Yangtze Delta will also undertake some international functions, such as tourism, trade, science and technology, or aim directly at becoming an international metropolitan. The economy in the entire region will transform into an export-oriented style. Therefore, the region will be the area having the greatest potential in China with high degree of openness, favourable investment atmosphere and much developed economy.
- 2) By adopting the urban-rural integration strategy, the first megalopolis in China will emerge along the Shanghai-Nanjing Railway, Shanghai- Hangzhou Railway and the Jiangnan Canal corridors, centring around Shanghai, Hangzhou and Nanjing. In particular, the five major cities, Shanghai, Nanjing, Suzhou, Wuxi and Changzhou, together with other medium to small towns along the Shanghai-Nanjing Railway corridor will develop into a rather flourishing urban agglomeration.
- 3) Characterized by the establishment of the shared-corporation system, merging and corporatization of township enterprises, large scale cultivation and comprehensive service system for agricultural activities, construction of modern small towns and rural settlements, the rural area in the Yangtze Delta is being remodelled and will coordinate with the cities to form a comprehensive economic region subsequent to the reform of the household registration system.

## REFERENCES

- CHEN, Wen *et al.* (1993), "The Characteristics and Tendencies of the Spatial Economic Variation in China", *Economic Geography*, 1993.1. (*in Chinese*)  
*Cities Herald (Shanghai)* (1992, 1993). (*in Chinese*)
- HUANG, Tianhua (1993), "Regional Economic Development and Opening-up in China", *Economic Geography*, 1993.5, p. 1-5. (*in Chinese*)
- STATE STATISTICAL BUREAU (1990), *The Forty Years of Urban Development*, Beijing: China Statistical Information and Consultancy Service Center. (*in Chinese*)
- \_\_\_\_\_ (1990-1992), *China Urban Statistical Yearbook*, Beijing: State Statistical Bureau. (*in Chinese*)
- YAO, Xitang (1993), "The Opening-up of Pudong and the Comprehensive Development of the Yangtze Valley", *Science and Technology Herald*, 1993.2. (*in Chinese*)
- YUAN, Du (1993), "On the Establishment of Pudong Rim in Jiangsu Province", *Science and Technology Herald*, 1993.10, p. 6-7. (*in Chinese*)

# 13

## **WUHAN - An Economic Centre of China's Interior Land in the 21st Century**

*Guangjie LIU*

Wuhan is a very important city located in the central area of China with an advantage of the geographical conditions and an advanced transportation system.

Being situated in the region of middle stream of Yangtze river, it is convenient to go to Shanghai in the east (1,125 kilometers) and to Chongqing in the west (1,375 kilometers) by waterway. There are regular cargo ships with the capacity of 5,000 -10,000 ton to Shanghai and 2,500 ton to Chongqing all year round. To the up-stream of Yangtze River, Wuhan's waterway passes through Dongting Lake and is connected with Xiangjiang, Yuanshui and Lishui River. To the down-stream, it goes through Jiangxi, Anhui and Jiangshu Province connecting with areas of Boyang, Chao and Tai Lake. Along Hanshui River, a tributary of Yangtze River, it can reach Shanxi Province and go to another river--Dan River.

Wuhan is located in the middle part of the railway line from Beijing to Guangzhou. To the northern part of China, it can reach Beijing City, Tianjin City and other provinces, and to the south it can reach Guangzhou and Shenzhen. Through the network of railways Wuhan is connected with Longhai, Lanxin, Qiangui, Handan and other railway lines, linking up with Shanxi, Ganshu, Xinjiang, Sichuan, Yunnan, Guizhou and other provinces.

Generally speaking, through the waterway, railway, highway and also the airline transportation system, Wuhan is connected with the main economic areas in China, for example, with Shanghai economic zone in the east, Chongqing economic zone in the west, the energy base in the north and Guangdong economic zone in the south. Wuhan is in fact as a bridge or a hub of communication to be connected with the coastal area and the vast interior land of China.

As a communication center Wuhan has been an important commercial center and famous entrepot for a long time in history. Usually the agricultural products and other local goods are transported from Hunan, Yunnan, Guizhou, Sichuan, Shanxi, Henan, Jiangxi, Anhui, Jiangshu and other provinces to Wuhan to be packed and processed, then exported to foreign countries or sold to Shanghai for exporting. At the same time, the imported industrial goods are sold to different places distributing through Wuhan. Therefore Wuhan spontaneously becomes a center for importing and exporting, trade as well as a center for transporting and selling goods.

By the end of Ming dynasty and at the beginning of Qing dynasty (in the middle of the 17th century), Hankou Town, a part of Wuhan City, is one of the four well-known towns in China, with the other three towns being Zhuxian, Jingde and Feshan Town. In the middle of the 19th century, Hankou became an importing and exporting trade port as interior land and foreign trade flourished. In 1980, Wuhan's foreign trade was 12.04 percent of China's total value of import and export, and it was the second largest trade city only smaller than Shanghai; therefore it was addressed as "The Chicago in the East".

In 1930s, Wuhan was in the second rank in terms of interior land trade, but in the fifth rank of foreign trade, and in terms of total business it still remained in the third rank in China. During that time, the major goods in Wuhan for exporting included cotton, tung oil, tea, hog bristles, gypsum and iron ore. Among them, gypsum, tung oil, cotton and iron ore accounted for 99%, 80%, 40% and 40% in quantity of China's total export.

Along with the development of interior and foreign trade, a lot of business institutions were established in Wuhan. Before the Second World War, there had been more than 140 foreign business institutions and also a number of business institutions running by people from other parts of China. Until the establishment of the People's Republic of China, there were still 1,200 foreign business institutions there at a proportion of 10 percent of total enterprises.

With the development of trade, the financial business also developed in Wuhan. Before the Second World War, in Hankou there had been 10 foreign banks established by the British, American, Japanese, German, French, Bulgarian and people from other countries. There were also 28 local banks and about 300 other financial institutions.

Since the foundation of the People's Republic of China, Wuhan's economic function and position has changed obviously. Its economic function and position as an industrial center has been evidently enhanced, but as an interior and foreign trade center, and as a reexporting port, it has decreased relatively.

Due to its location and transport advantage, its large capacity of goods transportation, its vast economic region and rich natural resources around the region, Wuhan is in a very good position to develop its industries. From the

end of the 19th century to the 1930s, Wuhan has developed its industry considerably. In particular its textile industry became one of the 5 largest textile centers of the country; its number of spindles was the same with Wuxi City, less than those in Shanghai and more than the amount in Tianjin. But during that time most industries in Wuhan were unsophisticated concentrating on the processing of agricultural products, such as edible oil refinery, leather, casing for sausages, tea process, rice, flour, cigarettes, matches, soups etc. The industries were weak. There were some iron and steel, machinery, and electricity industries, but they were very small and underdeveloped. The machinery industry, for example, only had some capability in repairing rather than manufacturing machines. During the time of the Second World War, lots of industrial enterprises in Wuhan were moved to further internal land areas. When Japanese invaders came, they looted almost all the rest of the machines, instruments and other goods. After the war, most of the enterprises that had moved to other areas did not move back to Wuhan, so that the industries could not restore and it made Wuhan's weak industries even weaker.

Since the establishment of the People's Republic of China, the central government has given a state investment priority to Wuhan in order to promote the industrialization in China. From 1953 to 1982, among 30 years, the central government invested 9.764 billion yuan RMB in Wuhan for the industrial development. This amount of investment accounts for 56 percent of the investment to the whole Province of Jiangshu by the central government. During the period of the First Five-Year Plan (1953-1957), the central government put forward 156 priority construction projects, 8 of them were set in Wuhan. Wuhan's industries speeded up. The total output of the manufacture section of Wuhan increased from .58 yuan (of the price of 1980) in 1953 to 11,038 yuan RMB in 1982, and the average growth rate is 10.7 percent per year; the original fixed capital value increased from .298 billion yuan (of the price of 1952) at the beginning of 1950s to 10.664 billion yuan RMB (of the price of 1980); the total value of the profit and tax provided to the government by state owned enterprises in Wuhan is 20.9 billion yuan RMB (of the price of 1980).

After more than 30 years of construction, Wuhan has formed an industrial base with relatively high level of technology and with relatively comprehensive industrial sections. By the end of 1982, among 25 large and middle size cities, Wuhan is in the 4th rank on total output, net output, original value of fixed capital, as well as profit and tax, following Shanghai, Beijing and Tianjin City. Wuhan has become an important industrial base and an economic center in China. It is one of the 5 largest metallurgical industrial bases, one of the 4 ship-building industrial bases and one of the 5 largest textile industrial bases. Wuhan's output and the value of iron, steel, steel

products, cotton yarn, cotton cloth, ship, boiler, machine tool, agricultural machine, chemical products, plastic for agriculture use and other producer's goods, cigarettes, soap, gourmet powder, radio and other consumer goods are all in an important position in the country. Most of its products were sold all over China.

On the other hand, since in the period after the establishment of the People's Republic of China, some countries adopted a policy of economic blockade, trade embargo and discrimination to new China, and also since China adopted a planned economic system and a closed-door policy, Wuhan's position and function as a trade center, financial center and reexporting port have decreased dramatically, although its position and function as an industrial base and economic center have been enhanced obviously. But that is the history.

In the 1980s, China entered a new era of reform and opening to the outside world. In this era, like in all areas of the country, Wuhan's economy caught a new development energy. Not only has its industrial position further developed into an important base and center, and some new key industries like automobile and high-tech industries and the equipment of laser communication were founded, but also that the central government authorized Wuhan as a foreign trade port. Thus Wuhan has increased its function and position as a trade center and reexporting port in interior land area. From 1980 to 1992, Wuhan's industrial output increased 7.95 percent per year; and from 1985 to 1992, Wuhan's total value of foreign trade went up from 52.54 million US Dollars to 450.12 million Dollars, increasing by 756.7 percent.

Entering 1990s, Wuhan has got special opportunities for speeding up its economic development. These opportunities are as follows:

- 1) In the 1980s, China's strategy placed the first priority on the development of the eastern coastal regions such as Guangdong, Hainan, Shenzhen, Fujian and Dalian, but in the 1990s, this strategy has changed to a new one of taking Shanghai as a starting point along the Yangtze river to build an economic development belt in a large area along Yangtze River, including Nanjing, Wuhan, Chongqing and other important cities.

In the regions of Yangtze River, there is an advantage of rich resources and natural conditions for producing a variety of goods, and it has been a most developed region in China for a long history. Giving a priority to develop the economy of Yangtze River region, China can reduce the gap of economic development between the coastal area and the interior land, to enhance the economic strength of the western region of the country and to promote the economic and trade relationship with the neighbor countries along the border. Even more importantly, it helps to pave the way for developing China's economy in a lasting, rapid and healthy manner.

Wuhan is located in the middle part of the region of Yangtze River. Whether in the past or nowadays, Wuhan has a close economic relationship with the regions of the up-stream, down stream and the tributaries of Yangtze River. Depending on this relationship and the advantage of its location as well as its advanced transportation system, also depending on the rich natural resources and the advantage of conditions for producing a variety of goods, Wuhan has become a trade center and reexporting port in history. As China's economic strategy changed to stressing on building the economic belt of the Yangtze River region, and as Wuhan was authorized as a city opening to the outside world, such conditions will provide an opportunity for Wuhan to revive its position as the largest trade center and reexporting port city in China's interior land.

- 2) After 70 years of planning, 50 years of surveying and 30 years of designing, the Three Gorges conservancy and hydroelectric project on Yangtze River was finally authorized by the National People's Congress in 1992. This is a giant scale and trans-century project with a high efficiency and multiple functions of preventing flood, generating electricity, transportation and water supply. This project will take 17 years to be built up.

The Three Gorges project is located in the Hubei Province in the middle part of Yangtze River, on the up-stream of Wuhan, the capital city of Hubei Province. The building of the Three Gorges project will inevitably bring deep and prolong influences for Wuhan's economic development. Firstly, it can provide a safeguard for the flood protection and supply inexpensive and sufficient energy for Wuhan. In fact the shortage of energy has been an important restrict factor on the development of Wuhan's economy. Secondly, the Three Gorges project needs huge amount of conservancy and hydroelectric equipment, metal framework, building machines, materials and vehicles, which will accelerate the development of industries in Wuhan especially the industries of equipment, metalwork, machinery, vehicles and building materials. Thirdly, the Three Gorges project needs huge amount of capita. Besides state investment, it needs loans from banks, non-state institutions, individuals, foreign countries and international organizations; this will foster and enhance Wuhan's financial market. Fourthly, the Three Gorges project will inject new energy into the economic growth of the regions of the up and middle stream of Yangtze River. If these regions' economy develops rapidly, it will provide an extensive base and a large market for Wuhan. We can conclude that the building of the Three Gorges project creates an extremely good opportunity for Wuhan's speedy development of

its industries, trade and finance from nowadays to the first half of the next century.

- 3) With the experiences of 10 years' reform and opening to the outside world, China has decided to establish a new socialist market economic system. During the transformation from the traditional planned economic system to the market system, together with the reform deepening and continuing, Wuhan, like other regions in the country, will get much autonomy in finance, products allocation and decision making. Wuhan can fully utilize its advantages, internal and international resources including capital and technology to make its economy rouser and further open to the outside world. Also Wuhan can fully utilize its rich experiences and traditional economic relations with other areas as an interior trade and entrepot trade center in the history, to establish a new market economic system, to develop new economic relations in the new situation and new era. The new system will change the economy of Wuhan into a more energetic city.

Generally speaking, in the era of transition into the 21st century, Wuhan meets with extremely good and valuable opportunities. Now Wuhan is going to reach and catch those opportunities with thoughtful preparations. In recent years, Wuhan has used most of its investment to build its infrastructures such as airport, riverport, electrical generating station, highway and communication system, and to foster its financial market including stock exchange market, in order to create a better environment for attracting internal and international investment. At the same time, the large and middle size enterprises in Wuhan as a main body of the whole economy have made technological transformations on one hand, and have transformed the enterprises' operation and established the modern corporation system and enterprise groupings to match up with the new market economic system on the other hand.

We can surely believe that in the 21st century, Wuhan will be the largest economic center of China's interior land. It will be different from the Wuhan as a trade and entrepot trade center only in the long history before the founding of the People's Republic of China, or the Wuhan mainly as an important industrial base in the 30 years after the establishment of new China. In the 21st century, Wuhan will be an economic center with great strength and multiple functions. That means it will not be only an important industrial center, but also a largest trade and financial center. It is very possible for Wuhan to establish the third stock exchange market in the mainland of China after Shanghai and Shenzhen. Wuhan will speed up its modernizations to catch up with the steps of the advanced countries.



## **INDUSTRIALIZATION AND URBANIZATION IN THE PEARL RIVER DELTA REGION**

*Xueqiang XU and Rong ZHANG*

### **INTRODUCTION**

Socio-economic development brings about regional urbanization. As the number of city increases, urban landscape gradually spreads into rural areas; urban functions are changed and an urban system is formed. On the one hand, this will increase the economic capacity of the region and form the base of outward diffusion; on the other hand, this will improve the regional investment environment to absorb more and larger projects. Therefore, all will push the urban expansion forward and upgrade the position of the city within and outside the region. Regional economic development will have a positive relationship to urbanization.

In the 1980s, every city or county in the Pearl River Delta (PRD) has fully taken advantage of the reform and open door policy and made a great success in economic development. In the meantime, urbanization level has been raised. The proportion of urban population in the total population has risen from 29.5% of 1982 to 44.2% of 1990, which is one of the highest in China. The paper will analyze the factors which affect the urbanization in the PRD and discuss the impact of industrialization on urbanization and regional economic development.

### **INDUSTRIALIZATION LEVEL AND URBANIZATION**

Because of the implementation of reform and open door policy in China, the PRD has been changed into the window of China to the outside world from a region which was unsuitable for state investment. Its location bordering Hong

Kong and Macau and the establishments of Special Economic Zones, Coastal Opening Cities and the PRD Economic Zone brought about the necessary capital for the economic development of the PRD. The PRD accounted for 2.3% of the total national investment in fixed assets in 1980 and 5.8% in 1991. The economic growth rate in the PRD is listed among the quickest in China. Between 1980 and 1991, the growth rates of total social output value, national income and gross industrial output value were 19.2%, 16.0% and 22.1%, all of which were more than the national growth rates. The main characteristics of economic development in the PRD are the following.

Firstly, an open economy has gradually been built. The highest annual growth rates of the main economic indicators are the foreign capital actually used and the total value of exports (Table 14-1). In 1991, these two indicators amounted to 18.4% and 14.8% of the total national value respectively; thus the PRD becoming one of the main regions of absorbing foreign capital and creating foreign exchange earnings in China.

**Table 14-1 Annual Growth Rates of Main Economic Indicators Between 1980 and 1991**

<b>Indicator</b>	<b>% per year</b>
Population	1.7
Total Output Value of Society	19.2
National Income	16.0
Gross Output Value of Industry and Agriculture	20.0
Gross Output Value of Agriculture	6.9
Gross Output Value of Industry	22.1
Total Value of Retail Sales	19.9
Total Value of Exports	29.5
Foreign Capital Actually Used	30.9
Total Investment in Fixed Assets	30.6

Secondly, industrialization is speedily pushed forward. As indicated above, the growth rate of the PRD gross industrial output value has been higher than the average national one, and is also twice more than that of the gross agricultural output value of the region. In 1980, the proportion of industrial output value in the gross output value of industry and agriculture combined was 78.8% and by 1991, it has risen to 88.1%. The PRD has become a newly-developed industrial zone.

The two characteristics are interrelated. Just because the majority of investment in fixed assets was directed to industry, the industry in PRD can develop at an unprecedented speed; in return, industrial development has provided the huge material base for foreign export. Therefore, economic development in PRD is based on industrialization.

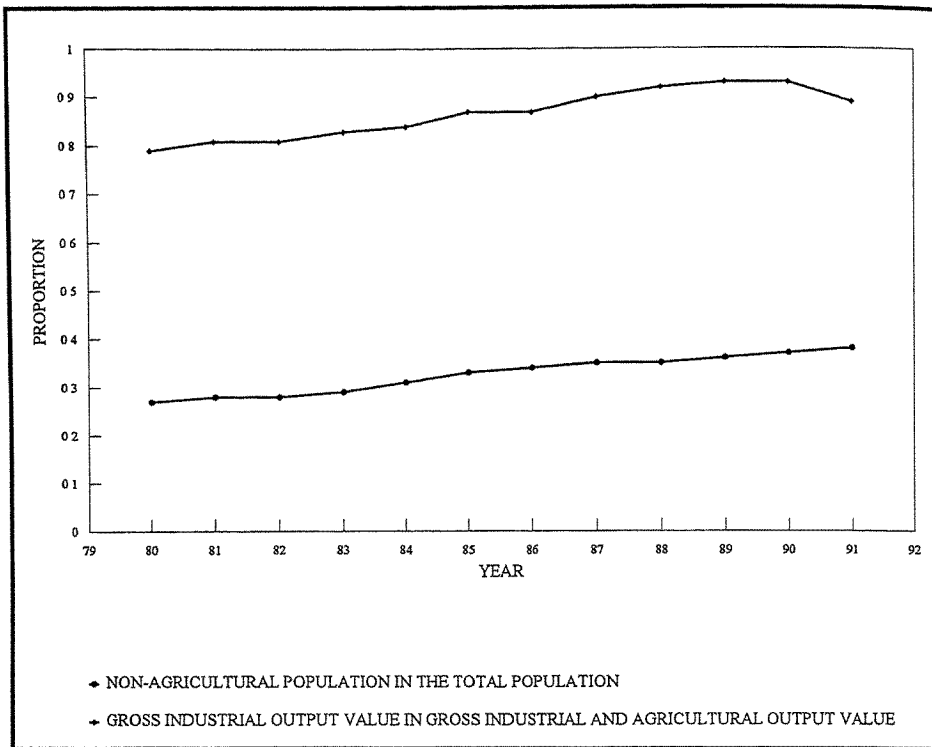
The promotion of industrialization has driven the urbanization process in the PRD. As shown in Figure 1, the proportion of non-agricultural population in total population is rising step by step following the increasing proportion of industrial output value in the gross output value of industry and agriculture combined. However, Figure 14-1 reveals two abnormalities. First, the proportion of non-agricultural population between 1983 and 1984 increased more quickly than in other periods. The chief reason was that beginning in 1984, peasants (or agricultural population) have been allowed to reside in cities and towns on the prerequisite that they can satisfy their own need for grain by themselves. Secondly, the proportion of industrial output value in the gross output value of industry and agriculture has dropped to 88.1% in 1991 from 92.9% in 1990. This was the only decline between 1980 and 1991. The primary reason was that Guangdong Province first deregulated the prices of agricultural products in China in 1991. So the gross agricultural output value increased by twice more than the one in 1990, although the yields of main products merely increased by 22.5% at most.

Industrialization has played a very important role in the regional disparity of urbanization as well. Table 14-2 shows the correlation coefficient matrix between the proportion of non-agricultural population in total population and other variables in 1991. The correlation coefficients indicate that GNP per capita had the greatest effect on urbanization level and the proportion of gross industrial output value was the second. Moreover, it is revealed that GNP per capita was influenced by the proportion of gross industrial output value to a great extent.

With the rapid development of industrialization and urbanization, the urban landscape has obviously extended in the PRD. As a result, it is unavoidable that a huge amount of agricultural land has been converted in its use. In 1980, the average occupied area per town was 0.62 square kilometers; and by 1986, it rose to 1.44 square kilometers.<sup>1</sup> From 1980 to 1991, the cultivated land area was decreased by 14.0% in the PRD, but that in the suburban area was diminished by more than 20%.

The population of the PRD has long been large and land area has been small, whereas the decrease of cultivated land area has further led to a decrease in the demand for agricultural labor. Thus the surplus labor from the rural areas may migrate into urban areas and accelerate the expansion of cities and

**Figure 14-1 Non-Agricultural Population and Gross Industrial Output Value Over the Years**



towns. Fortunately, the speedy industrialization in the PRD since 1978 has produced a great number of employment opportunities that have absorbed the surplus agricultural labor from both the local and other regions. However, a more serious problem caused by the decreasing cultivated land is that agricultural produce cannot meet local basic need and consequently will lead to a dependence on external regions in the future. Therefore, the following points should be noted. Firstly, in the industrialization and urbanization process, we should use arable land effectively, open up hilly land, take up as little arable land as possible and increase the value of various land types. Secondly, we should establish conservation zones of agricultural land in suitable areas. This only satisfy the basic need for the agricultural produce, but also preserve the regional environment.<sup>2</sup> Lastly, we should invest in the agriculture in those other regions which will become the sources of local agricultural products.

Table 14-2 Correlation Coefficients Matrix

Variable	Y	x1	x2	x3	x4	x5	x6	x7
Y	1.00	0.85	0.76	-0.65	-0.25	0.68	0.37	0.67
x1		1.00	0.80	-0.53	-0.40	0.67	0.29	0.61
x2			1.00	-0.63	-0.57	0.52	0.36	0.65
x3				1.00	0.35	-0.42	-0.37	-0.49
x4					1.00	-0.14	-0.20	-0.38
x5						1.00	0.12	0.69
x6							1.00	0.51
x7								1.00

Y = (non-agricultural population)/(total population)

x1 = GNP/(total population)

x2 = (gross industrial output value)/(gross output value of industry and agriculture)

x3 = (gross output value of rural industry)/(gross industrial output value)

x4 = (total value of retail sales)/(total social output value)

x5 = (gross agricultural output value)/(total cultivated land square)

x6 = (foreign capital actually used)/(total investment in fixed assets)

x7 = (total value of exports)/(total social output value)

## INDUSTRIALIZATION LOCATION AND URBAN SIZE STRUCTURE

Industrialization was not evenly distributed in the whole region of the PRD in the 1980s and distinct spatial differentials exist. Table 14-3 shows that the majority of counties and cities have a greater annual growth rate of gross industrial output value than that of total social output value between 1980 and 1991 and are experiencing the industrialization process. Table 14-3 also indicates that the inner ring area of the PRD (Figure 14-2), which consists of the counties and cities along the Pearl River Estuary, has industrialized much more rapidly than the outer ring area and new cities more rapidly than old cities in most cases. Therefore, the population of new cities in the inner ring area has grown at the highest speed. For example, the annual growth rates of population are 16.0% and 7.4% in Shenzhen and Zhuhai respectively. The population of the city proper in the cities established after 1990 has increased by more than 40% from 1982 to 1990.

It should be noted that nucleus cities in the outer area of the PRD have been consolidating their position. Guangzhou, located at the center of the PRD, has economically grown at a rate lower than the cities under its jurisdiction. Foshan and Jiangmen cities have developed at almost the same rate as the cities under their jurisdictions. In contrast, Zhaoqing and Huizhou cities, located in the northwest and east of the PRD respectively, have grown more speedily than the cities and counties under their jurisdiction. This partly reflects that the later two cities are becoming the growth pole in the outer areas and the polarization process has appeared.

Besides, Table 14-3 reveals that Guangzhou, Foshan and Jiangmen cities are the only 3 cities whose growth rates in total social output value are higher than their growth rates in gross industrial output value. It illustrates that in these three cities industrial effects on their development have been weakened and the tertiary sector has become more and more important. In the other areas of the PRD, industry still plays a very important role in their urbanization. As a result, old cities have the greatest population growth save special economic zones. This situation is absolutely different from their lower natural growth rate of population.

To sum up, industrialization expands the size of medium-size and small cities and changes the urban size structure in the PRD. The expansion of medium-size and small cities is one of the main characteristics of urbanization in the PRD. In 1982, there were 6 medium-size and small cities and an extra-large city. The population of Guangzhou, which is the largest city in the region, was 9 times more than that of Foshan, the second largest city. In 1990, there were 8 medium-size and small cities, a large city and an extra-large. Shenzhen became the second largest city, whose population was 880,000, only 2.5 times less than that of Guangzhou. Since 1990, 15 counties have been approved to establish cities. The increase in the number of medium-size and small cities has improved the urban system in the PRD and gradually formed the hierarchical order structure comprising extra-large cities, large cities, middle-size cities to small cities. The number of cities in the above size order was 1-0-2-4 in 1982 and 1-1-7-14 in 1993.

Regional industrialization drives the development of medium-size and small cities, but threatens the position of Guangzhou as the central city of the PRD. Before 1980, Guangzhou had been the natural central city, and its population and total social output value accounted for 17.2% and 42.3% of the total in the PRD. In 1991, Guangzhou's population still amounted to the same percentage but the proportion of total social output value dropped to 25%. Relatively, per capita GNP in Guangzhou dropped from the almost top in 1980 to the middle level in 1991 in the region, and was only 69% and 56% of

Shenzhen and Foshan respectively. During the period, its growth rate of total social output value was lower than all other cities and counties except Guangning County. For this reason, Guangzhou's position in the PRD will be further reduced to a lower rank.

**Table 14-3 Growth Rates Per Year of Main Economic Indicators in the Pearl River Delta Between 1980 and 1991**

City (County)	Total Social Output Value	Gross Industrial Output Value	Population
the PRD	23.7	25.0	1.7
Guangzhou*	17.8	16.1	1.6
Huadu***	21.6	26.3	1.8
Conghua***	23.2	29.0	1.7
Zengcheng***	20.2	28.0	1.9
Panyu***	23.9	28.4	1.6
Shenzhen**	54.7	73.8	16.0
Baotan	39.7	51.4	2.2
Zhuhai**	36.1	52.0	7.4
Doumen	26.2	30.8	0.3
Foshan*	27.0	26.6	2.9
Sanshui***	28.4	37.2	1.3
Nanhai***	24.3	27.4	1.5
Shunde***	27.1	28.0	1.5
Gaoming***	25.9	36.4	1.5
Jiangmen*	21.5	21.3	3.1
Xinhui***	21.9	26.4	0.8
Taishan***	20.4	27.0	0.5
Enping***	22.7	27.6	1.3
Kaiping***	22.7	28.1	0.9
Heshan***	22.0	33.9	0.8
Zhaoqing*	24.2	25.6	2.6
Gaoyao***	20.0	25.8	1.3
Sihui***	22.0	27.4	1.2
Guangning	16.8	19.5	1.4
Huizhou*	39.5	46.4	4.5
Huiyang	25.1	29.8	1.7
Huidong	20.2	28.2	1.6
Boluo	19.1	26.5	1.2

**Table 14-3 Growth Rates Per Year of Main Economic Indicators in the Pearl River Delta Between 1980 and 1991 (continued)**

City (County)	Total Social Output Value	Gross Industrial Output Value	Population
Qingyuan**	20.5	21.3	1.6
Dongguan**	25.3	29.6	1.6
Zhongshan**	25.5	28.8	1.3

Notes : \* -cities established before 1978  
\*\* -cities established between 1978 and 1990  
\*\*\* -cities established after 1990

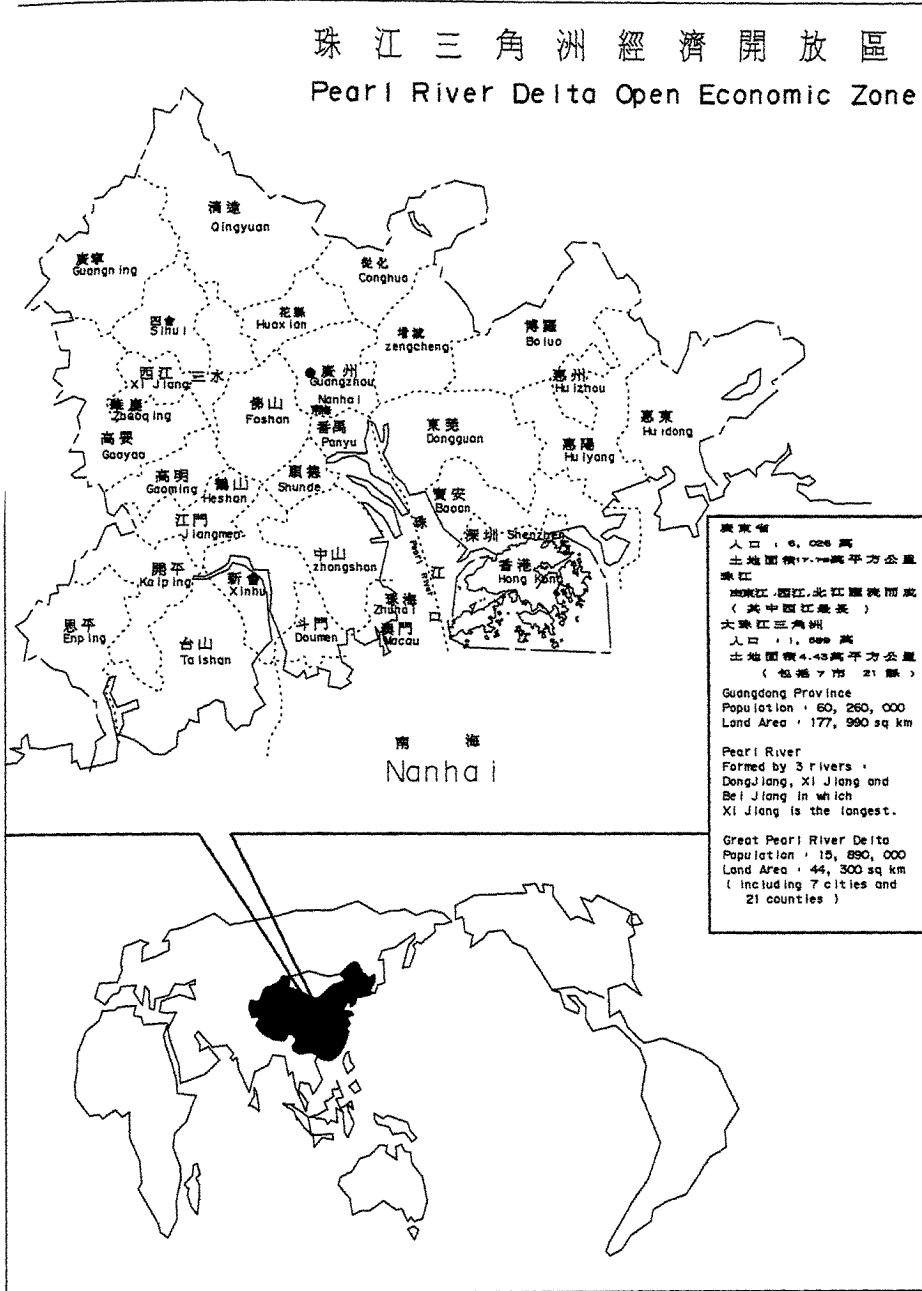
To sustain its central position, Guangzhou should give energetic support to the tertiary sector, especially such industries closely related to economic activities such as banking, commerce and trade, information and specialized service. Guangzhou's industry must be further developed, but should take the highly-technological and capital-intensive industry as the key link. In addition, Guangzhou should strengthen the cooperation with the other cities and counties in the PRD. It is not impossible to build an international metropolitan zone by using the present conditions of Guangzhou, and the infrastructure facilities and economic capacity of the PRD.

## **INDUSTRIAL STRUCTURE AND URBAN FUNCTION**

Generally, industry invested by the state was predominately the heavy industry. However, the industrial structure in the PRD is different. Light industry is much more important than the heavy one. This is formed under the synthetical effects of local resources situation, its established industrial status and the industrial structure of Hong Kong and Macau. The ratio of light industry to heavy one is 0.46 in 1980 and 0.43 in 1991 in the PRD, while respectively 1.01 and 1.05 in China. In the PRD, there are few mineral resources which are suitable for and worth exploiting. Historically, industry mainly included those related to agriculture, such as food processing, silk reeling, textile industry and sugar refining. In the 70s, due to an emphasis on agriculture, small-scale enterprises which produced agricultural tools and chemical fertilizers had played an important part in the PRD economy, particularly in the medium-size



Figure 14-2 Pearl River Delta Open Economic Zone



**Table 14-4 Proportion of Gross Industrial Output Value in Total Social Output Value in Cities**

Year	1980	1991	Year	1980	1991
Guangzhou	76.3	64.6	Zhongshan	55.0	72.7
Shenzhen	18.9	68.1	Jiangmen	78.5	77.1
Zhuhai	23.4	79.0	Foshan	89.7	87.3
Huizhou	54.3	91.8	Zhaoqing	56.2	63.3
Dongguan	43.3	62.9	Qingyuan	33.4	35.9

and small cities. Because land price was very high, processing industry was the main stream of industry in Hong Kong and Macau. Since 1980, processing enterprises began to move into the PRD with the transition of economic structure and the rapid development of the tertiary sector. As a result, the changes in industrial structure of the PRD took place to some extent. The manufacturing of electric appliances, plastic industry, textile and clothing industry and food processing industry gradually became the chief industries.

Industrialization has changed the urban function in the PRD. Until 1980, cities and towns in the region had been the administrative and goods distributing centers within their jurisdiction. Consequently, central place function was quite obvious. Recently, the above mentioned characteristics of industrial structure began to have an impact on urban function, especially in newly-built cities.<sup>3</sup> At present, medium-size and small industrial cities have taken the place of the market towns. Corresponding to the locations of the industries, there are two kinds of changes in urban functions:

The first kind is represented by Guangzhou, Foshan, Jiangmen, Zhaoqing and Huizhou. In this category, on the one hand, the tertiary sector began to become more and more important, while manufacturing's significance is dropping in those cities which are located in the inner ring of the PRD. On the other hand, in the outer cities manufacturing is growing important (Table 14-4).

The other kind of urban function is represented by those cities whose industrial function is being formed and greatly influenced by the 1980s regional industrialization. This category includes:

- 1) Cities whose industrial function has grown out of nothing, for example Shenzhen and Zhuhai Special Economic Zones.

- 2) Cities which strengthened their industrial function in the past decade. Shunde City is a better example.
- 3) Cities whose dominant industry has been changed from one to another, such as Xinhui<sup>4</sup> and Dongguan Cities.

In the process of industrialization, industry is the base of urban development and the dominant sector of urban economy. In fact, the function of medium-size and small cities in the PRD has experienced a process from convergence to divergence. At the beginning almost all cities were administrative centers; then, they became small industrial cities; currently, they are medium-size and small specialized industrial cities. In the future, they will possibly develop to even larger industrial cities or comprehensive cities just like Shenzhen.

## **INDUSTRIALIZATION POLICY AND URBANIZATION MODE**

Because every city has its own industrialization policy, it has its own unique characteristics. In the PRD, there are two kinds of industrialization mode. One is the industrialization in the Special Economic Zones and the other is rural industrialization.

The industrialization and urban development in the Special Economic Zones is a particular type not only in the PRD, but even in China. During the period from 1980 to 1991, the gross industrial output values of Shenzhen and Zhuhai grew at 73.0% and 52.0% per year respectively, which were the highest in the PRD. Baoan and Doumen, bordering Shenzhen and Zhuhai respectively, had the annual growth rates of 51.4% and 30.9%. All these reflect the characteristics of industrialization and urbanization that have completely changed past features, because a great amount of capital was poured into the Special Economic Zones under the guidance of national policy.

But the above industrialization is not a normal way and has not come true easily. Rural industrialization in the PRD which takes Dongguan, Nanhai, Shunde and Zhongshan as the representatives, is of common significance. The four cities, established after 1980, are located in the more developed area of the PRD and have some differences in their industrialization policy.

Dongguan is the earliest city benefiting from the "Three Processings and One Compensation" enterprises. In the early 1980s, Dongguan owned the most SLYB enterprises in the PRD. In 1985, the revenue from these enterprises amounted to more than 60 million U.S. dollars, which accounted for 43.4% of the total in the PRD.<sup>5</sup> Because Sanlaiyibu enterprises have the features of small

scale, relatively low technology and foreign investors supplied raw materials, they are very suitable for towns and rural areas, thus bringing about the development of rural and township enterprises.

The development policy of township and rural enterprises in Nanhai is "Insisting on taking the collective enterprises as the key link and developing enterprises of five levels", based on the many rural enterprises consolidated in the early 1980s. Consequently, rural industry got a faster growth and accounted for 40.3% of the gross industrial output value in 1991, which is one of the highest in the PRD.

Shunde historically had a more developed commodity economy and a higher proportion of non-agricultural population than other cities and counties. For the purpose of solving the employment problem of urban population, Shunde had built a rather strong industrial base in the 70s, which mainly consisted of collective enterprises. Therefore, Shunde has adopted the policy of "Developing collective economy and building up large-scale enterprises" since 1980. In 1991, there were 18 enterprises whose output values were over 100 million Yuan(RMB) and collective enterprise provided 3/4 of her gross industrial output value.

Relatively speaking Zhongshan emphasized the development of local state-run enterprises in the past decade. In fact the large-scale and medium-scale state-run enterprises have promoted the industrialization of the city.

So, the four cities are different from one another in urbanization in accordance with their industrialization policy. Generally, Shunde has the highest proportion of non-agricultural population, which is 29.4% in 1991, and Dongguan the lowest. In town density, Shunde has 2 towns in 1000 square kilometers more than Dongguan. As shown in Table 14-5, the average population per town in Shunde is 4-times as large as that in Zhongshan. On the one hand, this is because Shunde itself has a better urban base. Also it has more large-scale enterprises which can attract more laborers to its towns. In 1991, the average output value per enterprise in Shunde was 186%, 50% and 31% more than the ones in Dongguan, Zhongshan and Nanhai respectively. On the other hand, in most cases, state-run enterprises are more likely to be located in or near the central town. For this reason, the central town may become bigger and bigger and small towns may grow slowly. In Nanhai and Dongguan, rural enterprises which are distributed in the whole rural area hold an important place in the local industry and thus their town sizes is smaller.

In a word, it can be said that Zhongshan has chosen a top-down industrial development mode whereas Nanhai and Dongguan have picked a bottom-up one. As for Shunde, she strengthens the intermediate. This is resulted from their different local conditions, their original bases and the choices of their decision-makers for their economic development modes.

**Table 14-5 Town Size in Dongguan, Nanhai, Shunde and Zhongshan in 1990**

City	Dongguan	Nanhai	Shunde	Zhongshan
Population Density (per 1,000 square kilometers)	11.8	13.7	13.9	13.6
Average Population per Town	8,334	10,785	22,268	5,232
Number of Towns				
Total	29	16	11	23
<=2000 persons	3	0	0	10
2001-5000	13	6	0	7
5001-10000	7	2	3	4
>10000	6	8	8	2

### INDUSTRIALIZATION AND FURTHER DEVELOPMENT OF REGIONAL ECONOMY

Industrialization in the PRD has brought along regional urbanization. In return, the rise of urbanization level improves the investment environment, thus absorbing more investment and promoting economic development. Investment mainly comes from two aspects. On the one hand with the development of regional economy, local enterprises need to expand their production. Taking Shunde as an example, between 1986 and 1988, Shunde's investment in industry made up 65% of her total investment in the 1980s. On the other hand, there is increasing foreign capital from Hong Kong and other countries (territories). In 1980, foreign capital was 101 million U.S. dollars; in 1985, it rose to 746 millions and in 1991, it reached about 2 billions. In 1992, according to sales volume, five of the first ten foreign enterprises in China were located in the PRD.<sup>6</sup>

With the development of regional economy, the disparity between urban and rural areas has been reduced and integration is emerging. The average annual income per employee in the cities was 3.6 times as much as pure annual income per peasant in 1980 and the figure was 2.6 times in 1991. Therefore, living standard in the rural areas is rising and social welfare that in the past could only be given in urban areas can be obtained in many rural areas.<sup>7</sup>

At the same time, the PRD as a whole is exerting its influence to other regions through investment on the basis of the increasing regional economic capacity. Although the investment is now small-scale, its influence cannot be

disregarded and is very important for raising the PRD's position in the countries and abroad.

In contrast with the diffusion of capital, information, technology and culture caused by the floating population, investment in other regions is a phenomenon of active economic diffusion. In the former case, the PRD is only a magnetic center; but in the later case, the PRD is not only a magnet but also a radiative center. Now, there are two ways of economic diffusion in the PRD. One is based on administrative requirement. Since a great disparity of regional economic development exists in Guangdong Province, Provincial Government requires that a city (county) in the PRD must be connected with a less developed city (county). The former will provide certain employment opportunities for the laborers from the later. Besides, more importantly, it is required that the former provides capital, technology and information for developing the later's economy. All these aim at achieving a balance of economic development level in the province. The other way of economic diffusion is based on economic principle. Enterprises choose suitable locations to invest for the purpose of taking advantage of rich natural resources, low-price laborers and land in the less developed regions or for the purpose of improving their market share in the more developed regions or even abroad. Shenzhen began to invest in other areas in 1987 and this amounted to 3 billion Yuan (RMB) in 1992.<sup>8</sup> Following the expanding economic capacity, the ideology of diffusion should be strengthened. If a great amount of capital from Hong Kong had not been invested in the PRD, it would have been difficult to prove the importance of Hong Kong in the region. In fact this is one of the reasons why Hong Kong is much more important than Macau.

However, it is necessary for all cities and counties to cooperate to build the PRD metropolitan region. Through 1980 until present, the trend of administrative subdivision has apparently existed in the PRD. In the early 1980s, Foshan City included the present Foshan, Jiangmen and Zhongshan Cities. Shenzhen, which was a part of Huizhou City, currently is one of municipality directly under the Central Government and is not controlled by Guangdong Province in many aspects. Subdivision is needed to some extent in order that every city (county) develops its own economy faster. However, it cannot be disregarded that administrative subdivision might lead to each office administering its economic affairs without any cooperation but only competition.

To build the metropolitan region, an organization or institution should be established. It can organize all cities and counties together to consult with one another regarding the development of the PRD and plan the regional infrastructure; can it also contact every city (county) to achieve balance in

some public issues and solve the regional development problems. The organization or institution may not be an administrative institution but must possess enough authority.

The PRD absorbed the most foreign capital in the 1980s in China on account of cheap labor and land and special policy given by the Central Government. In the 1990s, it will make full use of the advantages formed by industrialization and urbanization to attract foreign capital. In fact, in the world the regions attracting the most investment is also the most developed ones because there is a huge market. It can be predicted that the PRD will still develop at a high rate and will further increase its level of urbanization. But certainly, it will also receive challenges from other coastal regions (especially Pudong) and inland provinces.

## CONCLUSION

In the 1980s, the rapid industrialization in the PRD drove the process of urbanization, but the distribution of the former has produced a spatial differentiation of the latter. Different industrial structures have influenced urban functions; the level of industrialization has decided the city size, while the industrialization mode adopted has also affected the regional urban system. Industrialization and urbanization have synthetically promoted overall development of the regional economy and have assumed a positive role in urban-rural integration and the formation of metropolitan region.

However, many problems must be given enough notice, for example the reduction of cultivated land, the declining position of the central cities and also interregional cooperation. Corresponding measures should indeed be taken.

## FOOTNOTES

1. XU, X.Q., Q. LIU and X.Z. ZENG *et al.* (1988), *The Development and Urbanization in the Pearl River Delta, Guangzhou*: Zhongshan University Press, p. 113. (*in Chinese*)
2. *Guangzhou Daily*, Oct. 29, 1993, p. 13.
3. XU, X.Q., Q. LIU and X.Z. ZENG *et al.* (1988), *op. cit.*, pp. 293-294. (*in Chinese*)
4. *ibid.*, p. 369. (*in Chinese*)
5. *ibid.*, p. 186. (*in Chinese*)
6. *Guangzhou Daily*, Nov. 1, 1993, p. 1.
7. *Nanfang Daily*, Oct. 18, 1993, p. 10.
8. *Nanfang Daily*, Oct. 3, 1993.

## REFERENCES

- GUANGDONG PROVINCIAL STATISTICAL BUREAU (1992), *National Economy Statistics in the Pearl River Delta between 1980 and 1991. (in Chinese)*
- \_\_\_\_\_ (1992), *Guangdong Provincial Statistical Yearbook. (in Chinese)*
- \_\_\_\_\_ (1993), *Guangdong Provincial National Economy Statistics by County Between 1980 and 1990, Chinese Statistical Press. (in Chinese)*
- GUANGDONG PROVINCIAL CENSUS OFFICE (1984), *The Third Census Data in Guangdong Province. (in Chinese)*
- \_\_\_\_\_ (1992), *1990 Census Data in Guangdong Province, Chinese Statistical Press. (in Chinese)*
- XU, X.Q. and C.J. CHU (1988), *Modern Urban Geography*, Beijing: China Architectural Industry Press. *(in Chinese)*
- XU, X.Q., Q. LIU and X.Z. ZENG et al. (1988), *The Development and Urbanization in the Pearl River Delta*, Guangzhou: Zhongshan University Press. *(in Chinese)*



## **TAIPEI'S ROLE IN THE REGIONAL DEVELOPMENT OF CHINA**

*Jing-huei HWANG*

### **INTRODUCTION**

In face of the trend of international economic regionalization, many economists have advocated that it is necessary for Mainland China, Taiwan, and Hong Kong to become integrated economically, which should form an economic organization called the "Chinese Economic Circle". Meanwhile, having considered the division of labour in the Circle, they advocated further that Taiwan should play an important role of providing both the capital and the industrial technology in a way to accelerate the development of Mainland China. (Table 15-1.)

Nowadays, their view points on the trend of economic integration of the areas and the role of Taiwan have been widely acknowledged by the public. Therefore, in this study, the said view points are taken as the basis for further evaluation.

Observing the three areas' trade developments (Table 15-2, Table 15-3, Table 15-4, Table 15-5 and Table 15-6), we find that between each area, both inter-dependence and a mutually beneficial relation are actually maintained. This fact further justifies the claimed "need" of organizing a "Circle", and also justifies that there is "need" and "room" for Taiwan to play an active role in the development of Mainland China.

**Table 15-1 List of View Points on Chinese Economic Circle**

Terms	Economists	Integration	
		Patterns	Region
1. Chinese Communique	Huang Chih-lien (1980)	Common Market	Fu Chien, Kuang Tung, Kuang Hsi, Hai Nan, Kang Ao, Taiwan
2. Chinese Bloc	Chen K'un-yao (1987, 10)	Common Market	Mainland China Taiwan, Hong Kong
3. Chinese Common Market	Tseng Chu-yuan (1988, 6)	Common Market	Taiwan, Mainland China, Kang Ao Singapore
4. China Economic Bloc	Chen I-t'sun (1988, 8)	Common Market	Mainland China, Taiwan, Hong Kong
5. Asia Chinese Common Market	Kao Hsi-chun (1988, 10)	Common Market	Taiwan, Mainland China, Kang Ao Singapore
6. Two Sides of Strait Economic Circle	China Hung-fan (1989)		Fu Chien, Kuang Tung, Kuang Hsi, Hai Nan, Kang Ao, Taiwan
7. Southern / Eastern China Free Trade Area	Chou Pa-Chun (1989, 9)	Free Trade Zone	Yang Tze River Delta, Chu River Delta, Kang Ao, Min Nan, Taiwan
8. Southern China Economic Cooperation Zone	Weng C'heng-Shou Hsu Hsin-Peng (1990)		Fu Chien, Kang Tung, Hai Nan, Kang Ao, Taiwan
9. Chinese Economic Cooperation Zone	Lieu tai-Yin (1992, 10)	Economic Association	Taiwan, Hong Kong Mainland China
10. Chinese Economic Circle	Tseng Mu-Yeh (1992, 10)		Taiwan, Hong Kong, Mainland China

**Table 15-1 List of View Points on Chinese Economic Circle (continued)**

Terms	Economists	Integration	
		Patterns	Region
11. China Economic Circle	Chou Shin-Chien (1992)	Free Trade Zone	Taiwan, Kang Ao, Mainland China
12. Chinese Economic Circle	YAMAGUCHI MASAAKI (1993, 4)		Mainland China, Taiwan, Kang Ao, ASEAN
13. Chinese Economic Circle	Ch'iu Yong-han (1993, 7)		Mainland China, Taiwan, Hong Kong

**Table 15-2 Taiwan's Export to Hong Kong**

UNIT: US\$100 Million

Year	Machine		Material		Trade Amount		Surplus
	Amount	% of Total Export	Amount	% of Total Import	Amount	% of Total Trade	
1987	41.2	7.7	7.5	2.0	48.7	5.5	+ 33.7
1988	55.9	9.2	19.2	3.9	75.1	6.8	+ 36.7
1989	70.4	10.6	22.1	4.2	92.5	7.8	+ 48.3
1990	85.5	12.7	14.4	2.7	99.9	8.2	+ 71.1
1991	124.3	16.3	19.5	3.1	143.8	10.3	+104.8
1992	154.1	18.9	17.8	2.5	171.9	11.2	+136.3
1993 (1-8)	122.0		11.0		133.0		+111.0

Table 15-3 Taiwan's Export to ASEAN Countries

UNIT: US\$100 Million

Year	Indonesia	Malaysia	Philippines	Singapore	Thailand	Total	Surplus
1987	4.5	2.7	4.6	13.5	4.5	29.5	7.4
1988	6.3	4.5	6.0	16.8	7.5	41.1	12.39
1989	9.3	6.9	7.8	19.8	11.1	54.9	23.30
1990	12.5	11.0	8.1	22.0	14.2	67.8	27.6
1991	12.1	14.6	8.5	24.0	14.4	73.6	25.8
1992	12.1	16.0	10.2	25.1	18.1	81.5	20.9
1992	2.7	5.9	2.2	1.9	4.3	2.8	2.8
-----	times	times	times	times	times	times	times
1987							

**Table 15-4 Mainland China's Export/Import to Hong Kong**

**UNIT: US\$100 Million**

Year	Machine		Material		Trade Amount		Surplus
	Amount	% of Total Export	Amount	% of Total Import	Amount	% of Total Trade	
1987	137.8	34.9	84.4	19.5	222.2	26.9	+ 53.4
1988	182.7	38.4	119.7	21.6	302.4	29.4	+ 63.0
1989	219.1	41.7	125.4	21.2	344.5	30.8	+ 93.7
1990	266.5	42.9	142.5	26.7	409.0	35.4	+124.0
1991	321.4	44.7	174.6	27.4	496.0	36.5	+146.8
1992	337.6	52.8					

**Table 15-5 Taiwan's Export/Import to Mainland China**

**UNIT: US\$100 Million**

Year	Export	Growth %	Import	Growth %	Total	Surplus
1987	12.26	51.2	2.89	100.35	15.15	9.37
1988	22.42	82.8	4.78	65.68	22.71	17.64
1989	28.96	29.2	5.87	22.60	34.83	13.09
1990	32.78	13.2	7.65	30.40	40.35	25.13
1991	46.67	42.3	11.26	47.11	57.93	35.41
1992	62.88	34.7	11.19	- 0.62	74.07	51.69
1993				- 6.46		
(1-5)	29.52	28.3	4.35		33.87	25.17

**Table 15-6 Export/Import of Mainland China (1987 -1992)**

UNIT: US\$100 Million

Year	Import	Export	Surplus (Deficit)
1987	432.2	394.4	-37.8
1988	552.8	475.2	-77.6
1989	591.4	525.4	-66.0
1990	533.5	620.9	87.5
1991	637.9	719.1	81.2
1992	805.2	763.5	41.6

### CHANGING SITUATIONS

However, as to the proposed role of Taiwan, there is room to examine it and to modify it because recently the situations have significantly changed in the following aspects:

1) *Taiwan's financial situation*

Unlike what the economists had thought in the past years, Taiwan's financial situation has recently become very tight because of the huge unpaid governmental obligation. Until 1993, it has amounted to US\$100 billion and another US\$60 billion will be added due to the needed expenditure of "6-year National Construction Projects". Consequently, in 1993, 11.37% of the national budget is consumed by the matured interest and principle of the obligations, and what is worse in AD 2000, it will increase to 35%. Obviously, the growing obligations will weaken in future the government's financial capacity.

In addition, the tremendous investments in ASEAN and Mainland China, as shown in Table 15-7, have aggregated to US\$22 billion up to 1992. Because of such huge investment outflow, the current financial capacity of the private sector should not be as strong as before. Further, it is known that plenty of their funds have been stuck in real estate investment, which makes the situation worse.

2) *Taiwan's industrial situation*

The fact that Taiwanese investment flooded into Mainland China and ASEAN has raised a risk of hollowing out Taiwan's own industry.

Table 15-7 Taiwan's Foreign Investment

UNIT: US\$100 Million

Year	Malaysia	Thailand	Indonesia	Philippines	Vietnam	Mainland China
1986	0.04	0.7	0	0.003	-----	-----
1987	0.9	3.0	1.35	0.09	-----	1
1988	3.13	8.4	9.16	1.09	-----	5
1989	8.15	8.7	1.58	1.49	-----	4
1990	22.36	5.3	9.42	1.43	-----	10
1991	-----	-----	-----	-----	-----	-----
1992	-----	-----	-----	-----	-----	-----
Total	55.00	42.0	39.0	4.0	10.0	about 70

Consequently, in the future, further outflow of industries will be discouraged unless it is consistent with the economic policy.

### 3) *Taiwan's industrial development goals*

Today, the ultimate goals of industrial development are to up-grade the industries, unlike before when any export-oriented industry was encouraged.

The aforesaid situations highlight that in the future, the majority of the outward movement of capital and industry will be guided to whatever is beneficial to the upgrading of the industry.

Besides, in Mainland China, the recent measures of deflation and currency devaluation have also created a new situation which would influence the future investments in the following aspects:

#### 1) *PRC government's decision-making*

Government's attitude in encouraging foreign investment may be adjusted to one which is more selective and conservative.

#### 2) *Foreign investors' decision-making*

Learning from the experience that many investors, who were involved either in real estate industries, or in domestic market oriented industries,

have suffered greatly due to the deflation and currency devaluation, the foreign investors will revise their future investment program such as decreasing the investments which would go to the above mentioned industries, and increasing those in those industries encouraged by the government.

Comparing this situation with that of Taiwan, we find that both the outflow of capital and industry from Taiwan, and the inflow of capital and industry to Mainland China are governed under the guidance of national industrial development goals. This trend somehow differs from the economists' estimate that there would be extremely broad dimensions for interflow; hence a modification on the designated roles of Taiwan is required.

## **THE ROLES OF TAIWAN**

Reevaluation based on the factors associated with the above situations concludes that the roles to be played by Taiwan are as follows:

### **To Materialize the Commercialization of High Technology in Mainland China**

Regarding the development of high-technology industries, the conditions in both areas can be demonstrated point to point as follows:

#### **A. *Taiwan***

##### *a) Advantages:*

- i) Complying with the goal of her policy.
- ii) Possessing huge foreign exchange reserves amounted to US\$85 billion which could be mobilized to support the desired developments.
- iii) Exceptional capability in product commercialization and international marketing.
- iv) Possessing a big existing foreign market shown in Table 15-8, which include:
  - Finished products - U.S., E.C., and others
  - Raw materials, parts, equipments - Mainland China, ASEAN, (shown in Table 15-9, Table 15-10, and Table 15-4)



*b) Disadvantages:*

- i) Weakness in high technology
- ii) Limited domestic market

Protection of domestic market is one of the indispensable factors to the development of high-technology industries, particularly in the introduction stage; yet, the small domestic market of Taiwan cannot provide a basis of enough de-velopmental capability.

**Table 15-8 Taiwan's Export and Import (1987 - 1993.6)**

UNIT: US\$100 Million

Year	Import	Export	Surplus (Deficit)
1987	468.9	289.6	179.3
1988	578.9	437.5	141.4
1989	635.6	509.0	126.6
1990	660.1	532.5	127.6
1991	714.9	586.1	128.8
1992	799.5	667.1	132.4
1993	419.25	385.9	33.3
(1-6)			
(1-8)			52.0

**Table 15-9 Major Commodities Exported to ASEAN from Taiwan**

UNIT: US\$100 Million

Country	Machine	Material	Total
Thailand	8.21(45.37%)	2.21(12.21%)	10.42 (57.56%)
Malaysia	8.03 (50.19%)	2.63 (16.43%)	10.66 (66.62%)
Indonesia	3.68 (30.29%)	2.65 (21.82%)	6.33 (52.11%)
Philippines	2.77 (27.07%)	3.70 (36.17%)	6.47 (63.29%)

**Table 15-10 Major Commodities Exported from Taiwan to Mainland China**

UNIT: US\$100 Million

Commodities	1988		1989		1990 (1-8)	
	Amount	%	Amount	%	Amount	%
1. Machineries	3.76	16.77	3	9.13	2.52	8.79
2. Plastic Raw Materials	2.75	9.14	3.21	9.79	2.96	10.33
3. Electronic and Electric Spare Parts	3.23	14.41	3.77	11.49	2.83	9.9
4. Yarn and Cloth	7.67	34.23	12.99	39.56	10.9	38.05
5. Others	5.69	25.00	9.86	30.00	9.43	32.93
Total	22.4	100%	32.8	100%	28.64	100%
Raw Materials and Parts	13	58.2%	20	60.9%	17	58.3%

**B. Mainland China**

*a) Advantages*

- i) Outstanding achievement in high technologies in some fields
- ii) Huge domestic market
- iii) Complying with the goal of her policy
- iv) Possessing a big foreign market shown as in Table 15-3

*b) Disadvantages*

- i) Weakness in capital capability
  - ii) Weakness in product commercialization
- Both are critical in realization of the said industries.

Observing the list, we can easily find that the related conditions in the two areas are mutually supplementary, and a combination of both sides' advantages will make the conditions complete. Therefore, in order to efficiently upgrade the industries to high technology level, Taiwan should work actively and try to mobilize the high technology resources in Mainland China. As a result, high technology will become commercially materialized.

### **To Establish and Expand the Export Oriented Industries in Mainland China**

From Table 15-1, Table 15-2, Table 15-3, and Table 15-4, it is shown that the major export commodities of Mainland China are almost the same as those manufactured in Taiwanese invested industries. It reveals the fact that Taiwan has greatly contributed to the establishment and expansion of export oriented industries in the Mainland. Since these commodities belong to labour intensive industries, the related investments from Taiwan will continue and the said contribution will continue, too.

Regarding Taiwanese investment programming in this subject, please see Figure 15-1.

### **To Guide the Mainland's Enterprises Toward Management Internationalization**

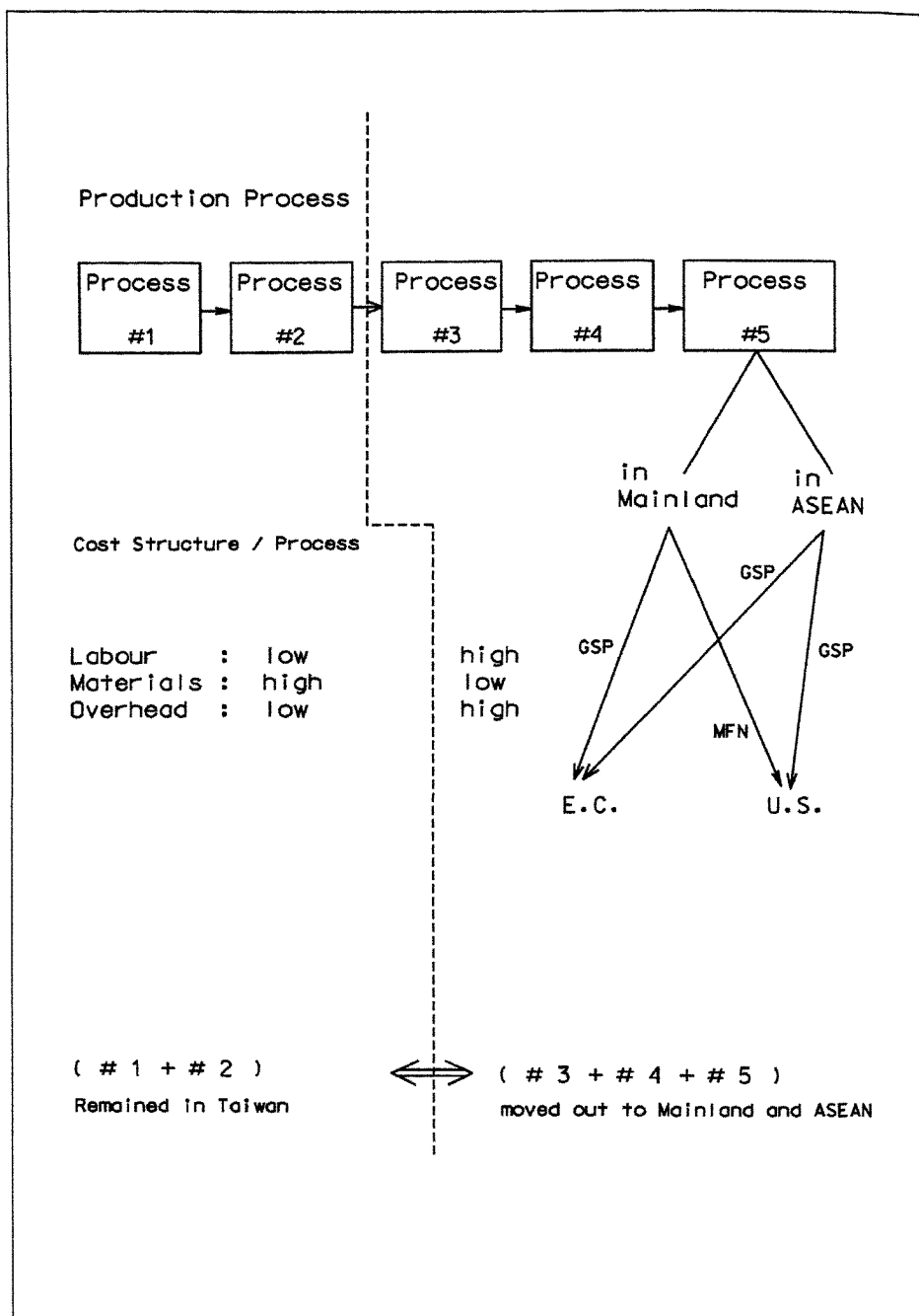
The effects of the Taiwanese investments in the Mainland are as follows:

- 1) The increase of investments has contributed to both the increase of raw materials, spare parts, and machineries exported from Taiwan to the Mainland, and the increase of finished products from the Mainland to U.S. and E.C.. In fact, it creates a double marketing effect.
- 2) It has greatly expanded the Mainland China's export.
- 3) The invested industries (shown both in Table 15-11 and Table 15-12) are the same as those industries in the Mainland which produce the most export commodities (shown in Table 15-13), and biggest growth (shown in Table 15-14). Hence, Taiwanese investment is like the engine which has driven the export expansion of the Mainland.
- 4) All the mentioned industries and commodities fall in the U.S. GSP Commodity List. Therefore, the commodities have been labour intensive, and the target market has been the United States.

Since Mainland China does not enjoy the GSP of the United States, it is very disadvantageous to produce and export from the Mainland to U.S. Further, if the MFN factor is added, the situation becomes worse.

- 5) The quota problem has seriously limited the future export of textile and limited the related Taiwanese investment.

Figure 15-1 Taiwanese Investment Programming



**Table 15-11 Taiwan's Top 14 Industries Invested in Mainland China as at April 1991**

<b>Industry</b>	<b>% of Total Investment</b>
1. Shoes	12%
2. Electric and Electronic	11%
3. Vehicles	8%
4. Plastics	8%
5. Garments and Gloves	5%
6. Metal Hand Tool	4%
7. Textile	3%
8. Christmas Lights	3%
9. Umbrella	2%
10. Sporting Goods	2%
11. Toys	2%
12. Handicrafts and Jewelry	2%
13. Handbags	2%
14. Clocks and Watches	1%
	65%

**Table 15-12 Taiwan's Top 10 Industries Invested in Mainland China as at June 1993**

<b>Industry</b>	<b>No. of Projects</b>
1. Electric and Electronic	1,208
2. Soft Drink	694
3. Plastic Ware	773
4. Rubber Ware	496
5. Metal	771
6. Machinery	891
7. Garments	487
8. Construction	223
9. Non-Metal and Mineral Products	454
10. Textile	318
	2,780

**Table 15-13 U.S. Tariff on China's Top 15 Export Commodities**

Commodities	With MFN Treatment	Without MFN Treatment	Article 310	GSP
1. Oil	N.A.	N.A.	----	----
2. Rubber Shoes	6.00%	35%	100%	0%
3. Woolen Textile	6.00%	60%	100%	0%
4. Toys, Non-Spring	6.80%	70%	100%	0%
5. Leather Shoes	10.00%	20%	100%	0%
6. Telephones	8.50%	35%	100%	0%
7. Toys (Inserted Form)	6.80%	70%	100%	0%
8. Dolls, less than 33 cm	12.00%	70%	100%	0%
9. Silk Socks	7.50%	70%	100%	0%
10. Toys (Animal Type)	6.80%	45%	100%	0%
11. Jewelry	20.00%	45%	100%	0%
12. Electric Fans	4.70%	35%	100%	0%
13. Radio	3.90%	35%	100%	0%
14. Electric Driers	3.70%	35%	100%	0%
15. Handbags	20.00%	45%	100%	0%

**Table 15-14 Commodities of Larger Export Growth in China, 1991**

UNIT: US\$ Million

Commodities	Export Amount	Growth %
Radio	75.66	40.3
Camera	55.35	34.9
Clock's	70.65	74.9
Garments (Cloth)	7,681.91	34.6
Garments (Leather)	246.11	46.1
Shoes	2,316.21	44.3
Toys	810.70	41.2
Umbrella	93.86	28.0
Luggage and Handbag	49.37	27.8
Furniture	236.00	41.1

- 6) Because the Mainland enjoys the E.C.'s GSP, its export to this market has increased sharply; however, an Article called "Competitive Need Limit " in the GSP, which is designed to limit the export volume of a specific commodity from a particular country, will restrain this increase.

The above mentioned facts indicate that if the export expansion is to be maintained, a move of foreign investment from the Mainland to other countries is needed. As to the areas of destination, the ASEAN countries are the ones for the said export-oriented industries, because these countries enjoy both the U.S. and the E.C. GSPs, while the beneficiary countries of the Lome Convention are the possible ones for the textile industries.

Besides, as the border trade has developed rapidly, the demand for outward investments will be very keen in the future.

While in the process toward outward investment and the associated international enterprises management, both guides and partners are needed. In this case, Taiwan is the qualified one to act both roles.

### **To Maintain and Re-Enforce the Existing Free Port System of H.K. After 1997**

Once the projects related to the above mentioned roles are undertaken, the extremely frequent interflow of materials and personnel between the areas will highlight the important function of a free port. Accordingly, the existing systems of Hong Kong will be required to remain unchanged by the areas, in which Taiwan would be the one that particularly backs up this requirement.

For further explanation of the function of Hong Kong, two formulated operation flow charts related to export and import respectively are shown in Figures 15-2 and 15-3. Each is based on the principles of tax saving and the prevention of loss incurred by the fluctuation of foreign exchange rate.

Figure 15-2 Export of Finished Products

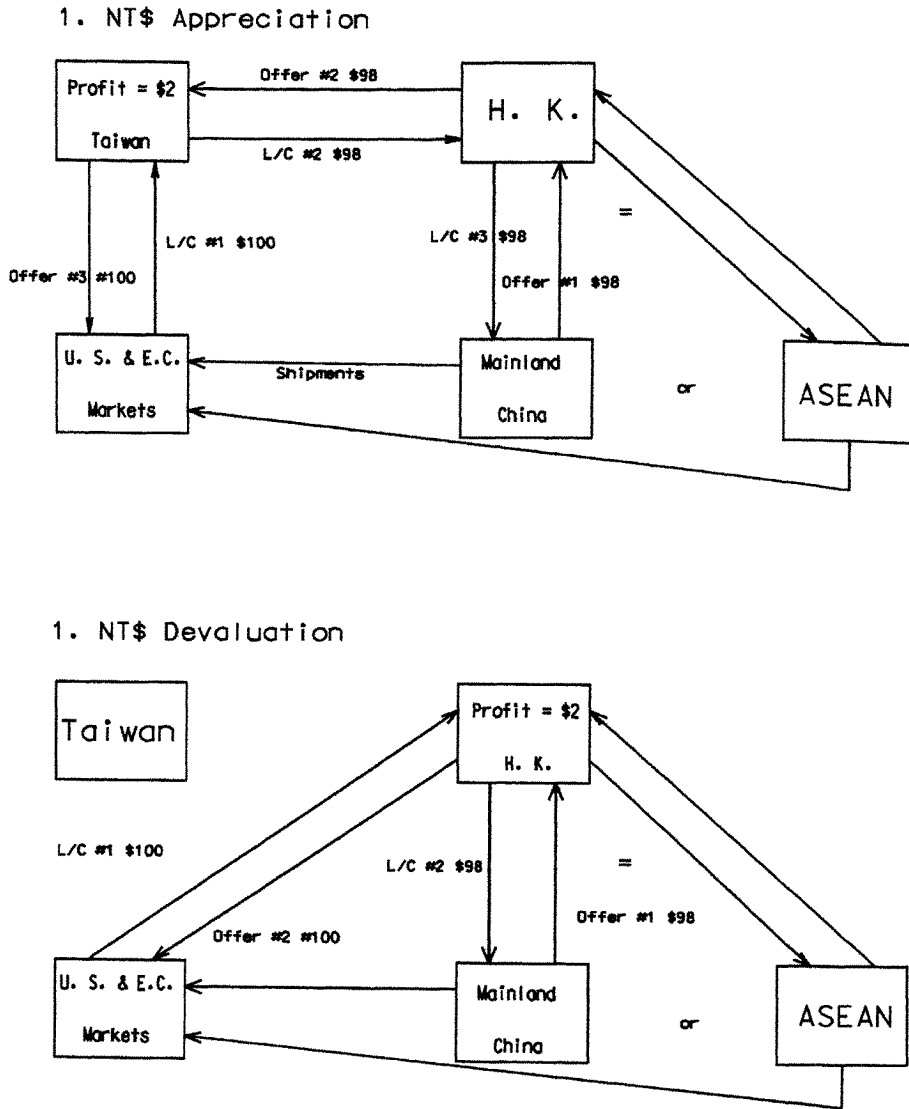
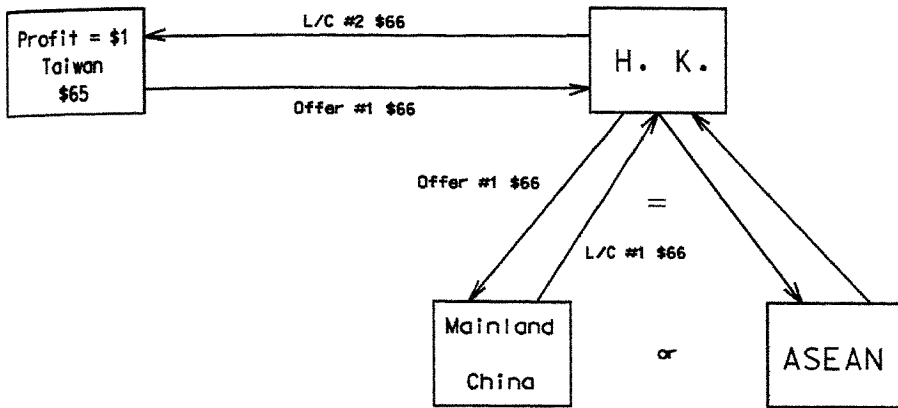


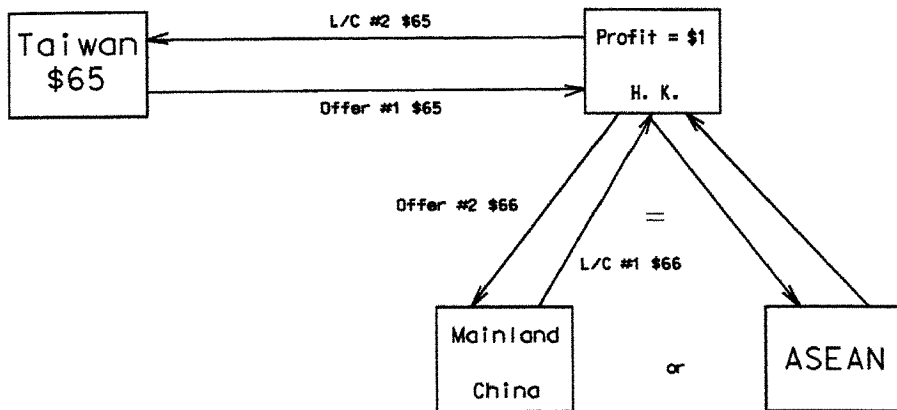


Figure 15-3 Import of Raw Materials

1. NT\$ Appreciation

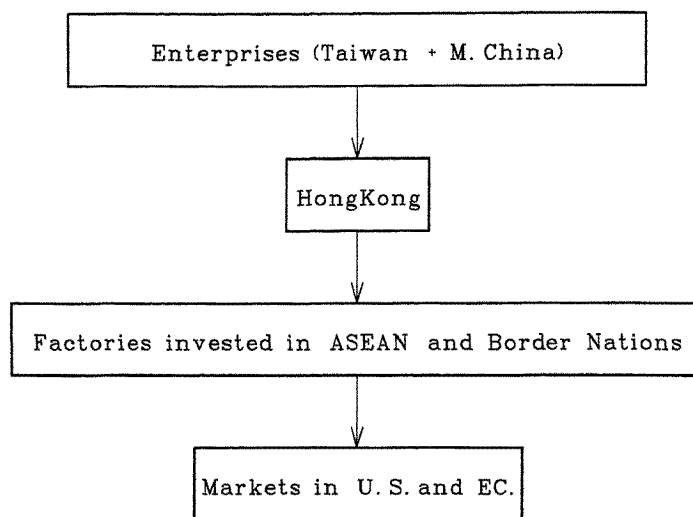


1. NT\$ Devaluation



The above flow charts describe the marketing process of a Taiwanese multinational enterprise; however, it is only applicable to the operation of the first stage in connection to the second role of Taiwan. As to the second stage, which is related to the third role, a multinational enterprise incorporated by parties of Taiwan and the mainland will operate in the manner as a simplified flow chart shows (Figure 15-4).

**Figure 15-4 Process in the Second Stage**



Analyzing all the flow charts we may find that the function of Hong Kong is indispensable and is growing important in every kind of operation. Accordingly, the necessity of the proposed role 4 is justified.

In parallel with the progress of the programs related to the above four kinds of roles, the regions in Mainland China will be assisted to develop in sequence specifically by the following stages:

- a) Cities neighboring Hong Kong
- b) Coastal provinces
- c) Cities connected to border trade
- d) Areas of inner provinces linked to the said cities and areas

As a result, a broad area even covering those of underdeveloped regions will be developed. Meanwhile, the goals of Taiwan, Hong Kong and Mainland China will be simultaneously realized.

## HONG KONG'S TERRITORIAL DEVELOPMENT STRATEGY

*Bosco C.K. FUNG*

### INTRODUCTION

The Territorial Development Strategy (TDS) is the highest tier in the hierarchy of development plans in Hong Kong. It provides a broad framework for preparing sub-regional and district plans and for integrating Government policies on land and infrastructure development.

In the 1960's and 1970's, the Hong Kong Outline Plan served as a TDS for the distribution of land use and population and laid the foundation for the subsequent new towns programme. In 1984, the first comprehensive territorial land use-transport planning framework for Hong Kong's future development up to 2001 was completed (Hong Kong Government, 1985). The Strategy recommended several major development areas (especially new harbour reclamations) which are now being implemented. The TDS was subsequently updated in 1986 and 1988 to take account of demographic changes and provide inputs to the Port and Airport Development Strategy (PADS) and Metroplan.

Then came decisions to relocate the airport to Chek Lap Kok and to expand port facilities in the Western Harbour area, and the adoption of the Metroplan to provide a planning framework for the restructuring of the Metro area. These key decisions now need to be related to the changing role of Hong Kong in relation to recent economic developments in South China. (The Pearl River Delta (PRD) region has developed into an important outward processing area for Hong Kong's industries. In return, Hong Kong serves as a major trading outlet, a primary channel for and source of investment for the wider region.) The TDS therefore needs to be reviewed to provide a long-term planning framework, up to 2011, for the provision of land and infrastructure in the Territory in such a way that complements and supports developments in the

PRD and other parts of South China.

The current review of the TDS has not been completed yet. It has only reached the stage of formulation and evaluation of development options (Planning Department, 1993a). The purpose of this paper is to outline the process of the current review and discuss some of the thinking behind the formulation of development options.

## **THE TDS REVIEW PROCESS**

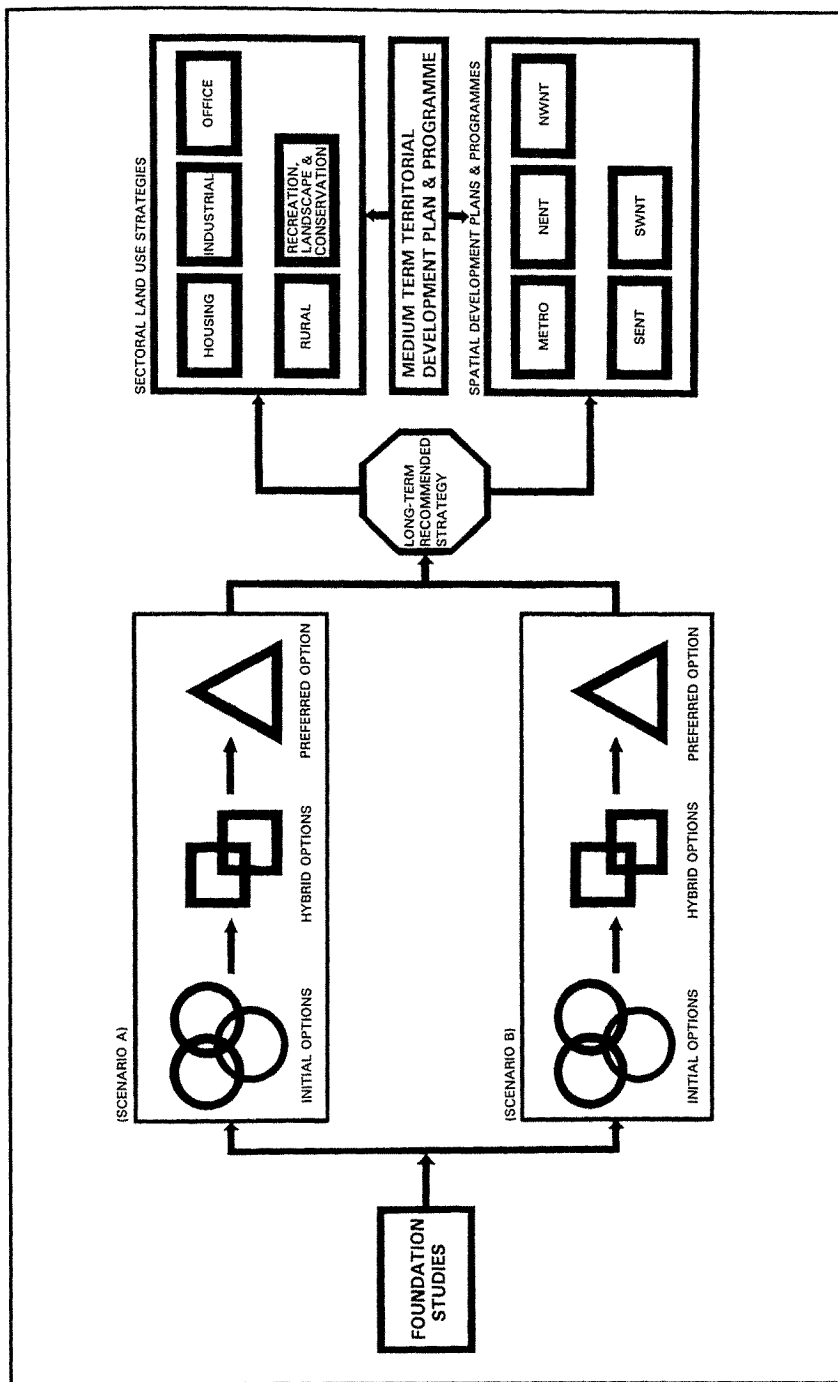
The broad process of the TDS Review is shown by Figure 16-1. Basically, it consists of three workstreams, namely :

- 1) **Foundation Studies** : comprising broad assessments of land use requirements, the identification of development constraints and opportunities, the preparation of sectoral land use strategy studies and the establishment of base growth development patterns as well as baseline infrastructure networks in the Territory. Much of this work has been completed (Planning Department, 1993 b).
- 2) **Options Formulation and Evaluation** : dealing mainly with the formulation and evaluation of development options on the basis of a series of evaluation criteria leading to the formulation of Preferred Options set in the context of a number of broad regional development scenarios.
- 3) **Recommended Strategy** : comprising a long-term strategy and a medium-term territorial development plan and outline programme incorporating committed projects and new "common components" from the Preferred Options. The Recommended TDS will also include for sectoral land use strategies (e.g. for landscape and conservation, housing, industrial and office development), and will propose a framework for implementation, monitoring and review.

## **FOUNDATION STUDIES**

The 1991 census shows a total Hong Kong population of 5.67 million in March 1991. It also reveals that there have been many important changes in the social and demographic structures of the Hong Kong population during the last decade which will have important implications for the future development of Hong Kong. These changes include declining fertility, ageing of population, shrinking household size, falling labour participation rate, and

Figure 16-1 Simplified TDS Review Process



declining manufacturing but rising tertiary employment. The 1991-based projected population for the Territory for the year 2011 is 6.47 million, which is 0.17 million down from the 1986-based projection of 6.64 million.

Initial proposals for sectoral planning strategies for major land uses are formulated at an early stage of TDS Review to provide 'building blocks' for formulating TDS Options. These sectoral strategies cover such issues as long-term housing needs, industrial land development, the development of offices and hotels, the future use of lowland rural areas, and the conservation of areas of high landscape value and ecological interest.

Concurrent with the TDS Review, a number of strategic transport planning studies have been initiated, including the Freight Transport Study, the Railway Development Study and the Updating of the Second Comprehensive Transport Study. The recommendations of these studies are being used as inputs to the TDS.

To incorporate environmental considerations at an early stage of the territorial planning process, an environmental "baseline" study has also been undertaken to provide input for deriving the TDS. The study has formulated territory-wide environmental profiles that will help determine the 'sustainable' level of development of each sub-region (Planning Department, 1993 c).

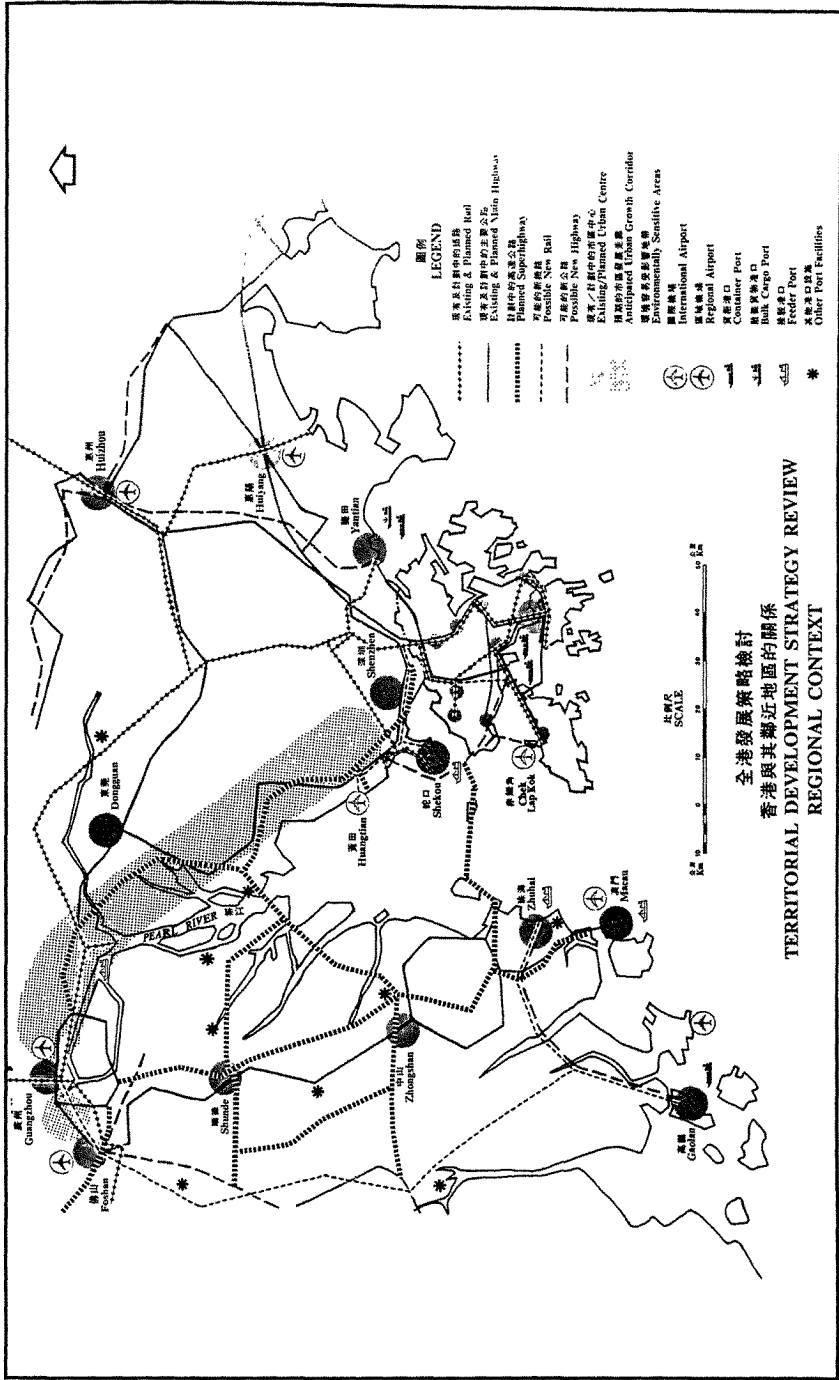
## **DIRECTIONS OF GROWTH**

In the formulation of the TDS, two principal considerations are:

- 1) the complementarity between Hong Kong and its economic hinterland in their development, in terms of provision of land, transport links and other key infrastructure and facilities; and
- 2) the distribution of growth areas within Hong Kong, having regard to the established development pattern and the opportunities and constraints for future development.

Within this context, two development axes can be identified. Firstly, the east-west gravitational pull from the development of the new port and airport facilities on North Lantau and Western Harbour, as well as the Metroplan proposals, would form an axis for future urban development. Secondly, with the rapid development along the east bank of the Pearl River and the development in the Northwest New Territories, a southeast-northwest development axis from Hong Kong to Guangzhou is also emerging. The regional context of Hong Kong in the PRD region is shown in Figure 16-2.

Figure 16-2 Territorial Development Strategy Review: Regional Context



## **DEVELOPMENT SCENARIOS**

One of the problems in long-term strategic planning is the degree of uncertainty associated with such issues as the pace of economic growth, the restructuring of business activities, new life styles, resource availability and other global issues beyond our direct control. This is particularly relevant to the TDS in view of the rapid developments taking place in Hong Kong and its economic hinterland. To help rationalise our approach to strategic plan formulation in such a way that we can better cope with future uncertainties, a scenario building approach has been adopted. The essence of this approach is to postulate alternative patterns of development based both on past trends and on visions of possible future directions of growth.

Based on such trends and visions, two development scenarios have been postulated for the formulation of the TDS development options. Scenario A assumes the PRD region as Hong Kong's primary economic hinterland while Scenario B includes both the PRD and the inner provinces of China as our economic hinterland. Two sub-scenarios have been developed under Scenario A, namely steady growth (AI) and high growth (AII). Scenario AI assumes a 'partnership' relationship between Hong Kong and the PRD in their development, Hong Kong retaining its traditional role as an entrepot but likely to experience a slower rate of growth. High growth under scenario AII assumes that Hong Kong will be the primary centre of development of the PRD, being the key trading outlet, servicing and financial centre for the region. Extra-high growth will occur in Scenario B where Hong Kong's influence will reach the inner provinces of China. These two scenarios are not mutually exclusive. Scenario B can be treated as the long-term logical extension of Scenario A.

## **DEVELOPMENT THEMES**

For each of the proposed development scenarios, two different development themes have been identified on the basis of the principal agents for project implementation, namely public sector-led and private sector-led. For public sector-led options, the intention would be to make the best use of the committed and planned public works programmes and possible public-funded site formation projects for strategic development. For private sector-led options, the intention would be to provide more investment opportunities by such means as the re-zoning of currently under-utilised land at suitable locations, joint-ventures or privatised schemes for urban or infrastructural development. The two development themes would not be mutually exclusive; rather, the difference is one of degree as to the sources of investment.



## FRAMEWORK FOR GENERATING TDS OPTIONS

Based on the postulated development scenarios and themes, six development options have been formulated on the basis of varying rates of economic growth, varying demand and supply of land for various uses, and varying roles of the public and the private sectors as development agents. The general framework is summarised in Table 16-1.

**Table 16-1 Framework for Generating TDS Options**

MAIN COMPONENT	SCENARIO A (PRD as Primary Hinterland)		SCENARIO B (PRD and Inner Provinces as Primary Hinterland)
	AI Steady Growth	AII High Growth	Extra High Growth
AIRPORTS	International airports at Chek Lap Kok and Fuyong (Huangtian)	International hub airport at Chek Lap Kok	International airports at Chek Lap Kok, Fuyong (Huangtian) and Macau
	Regional airports at Macau, Guangzhou, Huizhou	Regional airports at Macau, Fuyong, Guangzhou and Huizhou	Regional airports at Guangzhou and Huizhou
PORTS	Container hub ports at Hong Kong and Yantian	Container hub port at Hong Kong	Container hub ports at Hong Kong, Yantian and Gaolan
	Bulk cargo port at Yantian	Bulk cargo port at Yantian	Bulk cargo ports at Yantian and Gaolan

**Table 16-1 Framework for Generating TDS Options (continued)**

PORTS	Feeder ports at Shekou, Macau, Zhuhai and Pearl River towns	Feeder ports as for AI	Feeder ports as for AI
GENERAL LAND USE DEMANDS IN HONG KONG	Relatively low	Relatively high	Extra high
CROSS BORDER TRANSPORT DEMANDS	Relatively low	Relatively high	Extra high
INDUSTRIAL LAND DEMANDS	A range of relatively low, medium and high land needs derived from different assumptions on densities of development and locational preferences.		
COMMERICAL OFFICE LAND DEMANDS	A range of options based on the balance of land supply from new sites and redevelopment as well as on assumptions relating to desities of building development and locational preferences.		
HOUSING LAND DEMANDS	A range of low to high land requirements based on the assumed mix of public/private sector housing and densities of development.		
CONSERVATION AREAS	These will comprise areas of high landscape value and ecological significance which should be generally the same for all the scenarios.		
COMMON ELEMENTS	This will comprise "base growth" urban development and baseline transport networks which already exist or are committed.		
DEVELOPMENT THEMES	Public sector and private sector-led options for each Scenario.		

## **LAND USE IMPLICATIONS**

Within the above scenarios, a range of land use and infrastructure requirements have been established. Forecasts are based on past trends and the anticipated growth taking account of the following factors :

- 1) For industrial land : in addition to forecasting a range of floor space requirements, a range of densities of development is assumed in line with current market indications, suggesting a need to provide a wider variety of industrial premises. In parallel with the expansion of port and airport facilities and taking into account the upgrading of industrial technology, land will need to be identified for the development of a new generation of industrial/business parks.
- 2) For office land : in addition to forecasting a range of floor space requirements, different assumptions are made over the provision of land through new sites on the one hand and redevelopment on the other. While recognising the role of the CBD in enhancing Hong Kong's role as a regional business and finance centre, a hierarchy of secondary office nodes will also be required to meet the needs of small and medium-size business and to help spread loads on the transport network.
- 3) For housing land : the number of living quarters required has taken account of the growth of the indigenous population and the "temporary" population. "Temporary" population refers to people temporarily staying in Hong Kong for business, employment or family reasons; tourists and transients (people staying in hotels/boarding houses or on-board ocean-going vessels in Hong Kong waters) are excluded. A range of relatively low to high land requirements has been derived depending on the assumed split between public housing and private housing and on the densities of development. While there is a continuing need to emphasise the provision of high-density housing in existing and new urban areas to optimise the use of land and to improve transport efficiency, medium and low-density housing areas will also be required to provide a greater housing choice.

A forecast of a range of needs for major land uses is set out in Table 16-2.

**Table 16-2 Forecast Range of Demand for Major Land Use for the Period 2001-2011**

<b>Development Scenario</b>	<b>Housing Land</b>	<b>Office Land</b>	<b>General Industrial Land</b>	<b>Special Industrial Land</b>
AI	760 - 770 ha	35 - 40 ha	150 - 180 ha	100 - 120 ha
AII	760 - 770 ha	60 - 70 ha	130 - 160 ha	210 - 230 ha
B	1010 - 1020 ha	90 - 100 ha	80 - 110 ha	300 - 320 ha

Note: All figures are gross site areas.

## **TRANSPORT IMPLICATIONS**

The capacity of existing and planned highways and railways will have an important bearing on the planning of new development. Concentrated development along traffic corridors, particularly rail corridors, would increase the patronage of public transport and capitalise on the value of the land adjacent to transport interchanges. In parallel with this broad approach, there might need to be measures to discourage the use of private cars and, as a side benefit, enable our road network to be used more efficiently for vehicles that contribute to economic activities.

The transport networks required to cope with the low, high and extra high land use demand patterns would need to be assessed based on the increased level of economic activities between Hong Kong and China and also on the projected demands arising from internal economic activities. New internal networks and cross-border linkages are proposed based on the updated findings of current relevant transport studies such as the Railway Development Study. Route Y, which was first recommended under the Updating of the Second Comprehensive Transport Study to cater for the anticipated heavy north-south movements in the New Territories, is proposed under the high and extra-high growth scenarios as a possible additional cross-border link. It would link the proposed Lantau port facilities via a Tuen Mun Road southern bypass, Tuen Mun West to Ma Wan area in Shenzhen. It could also link with the possible Zhuhai - Tuen Mun Bridge. Other strategic options may need to be considered.

## **ENVIRONMENTAL IMPLICATIONS**

Besides making provision for new urban growth, a key objective in the TDS is to explore what level of growth and scale of associated development could be sustainable in terms of resource availability and environmental quality. Among other things, the ongoing assessment work must determine whether the level of development proposed, and the nature of the transportation systems envisaged in a particular scenario, can be accommodated without wholesale damage to the Territory's environment. It will be necessary to match development requirements against development capacities of each specific area, having regard to such infrastructural and environmental thresholds as traffic capacity, the capacities of existing and planned sewerage facilities and the assimilative capacity of receiving water bodies.

Unless a balance is maintained between economic development and conservation of the environment, the potential economic benefits may be outweighed by costs associated with environmental damage. Account will need to be taken in all low, high and extra-high land-use patterns of the need to safeguard areas of ecological importance and high landscape and recreation value. In this regard, areas of high conservation value such as South Lantau and the Outlying Islands, and a large part of the Northeast and Southeast New Territories outside the designated new towns should be considered as environmentally "no go" areas in which major strategic development should not be considered. A further important ecological consideration in the Northwest New Territories where development pressures can be expected to grow, will be the strict protection and conservation of the internationally significant Mai Po Marshes.

## **RESOURCE IMPLICATIONS**

As the strategic development packages are likely to incur large-scale and expensive up-front infrastructural investment, both by the public and private sectors, their resource implications will also need to be looked at. Special attention should be paid to the need to maximise the utilization of committed infrastructure and to the phasing of development to spread expenditures in an incremental way.

## **POSSIBLE FUTURE DEVELOPMENT PATTERNS**

The future development patterns conceived in the TDS development options are based on the assessed development scenarios and broad development axes.

Since the TDS assumes that all present committed and planned housing, infrastructural and development projects would be implemented, the main differences between the development patterns within each development scenario are the selection of the future growth areas and the intensity of development within such areas.

Possible future growth areas in Hong Kong up to 2011 for each sub-region are summarised in Figure 16-3. A possible major road and railway network to be considered with the strategic growth areas is shown in Figure 16-4. At this stage, the potential capacity of each sub-region should be regarded only as one of the principal components for the generation of options on a territory-wide basis. The final scale of development in each sub-region will be determined as an outcome of a comprehensive evaluation process.

### **THE NEXT STEPS**

The various development options, each with its own selection of future growth areas and proposed intensity of development within such areas, will be assessed using a series of planning, transport, environmental, economic and financial evaluation criteria. Through a separate public consultation exercise, the general views of the public on the future development of Hong Kong and their specific comments on individual elements of the development options will also be obtained and taken into account in the evaluation process. The 'good' elements of the various development options will then be taken forward and used as a basis for deriving for each development scenario a Preferred Option. Thereafter, the Preferred Options for the three scenarios will be further assessed with the intention of bringing the 'common components' together to produce a medium-term development sequence which, regardless of future long-term uncertainties, we can more confidently undertake. The same process can then be used as a basis for review from time to time. The 1984 TDS was constructed on this basis and has proved to be effective as a resource management tool.







**REFERENCES**

HONG KONG GOVERNMENT (1985), *Planning for Growth*, Hong Kong.

PLANNING DEPARTMENT (1993a), *Territorial Development Strategy Review - Development Option: A Consultation Digest*, Hong Kong: Planning Department.

\_\_\_\_\_ (1993b), *Territorial Development Strategy Review Foundation Report*, Hong Kong

\_\_\_\_\_ (1993c), *Territorial Development Strategy Review - Environmental Baseline Conditions*, Hong Kong.



**HONG KONG AND CHINA'S  
DEVELOPMENT - BUILDING  
TANGIBLE LINKS**



## **KWAI CHUNG - China's World Port?**

*Tony CLARK*

### **INTRODUCTION**

Colonial history, and in particular the need to trade was the reason for the original development of Hong Kong as a port. It was certainly the reason for the original British interest in Hong Kong and for the somewhat strange way in which we have allowed the port to be developed - almost entirely according to commercial priorities and with commercial funds.

In the hey day of the British Empire it used to be said that: "Trade follows the flag." In Hong Kong's case that flag followed trade. It was the merchants who saw Hong Kong's potential as a port for the China trade. They persuaded a reluctant government in London to take over what the then Foreign Secretary described as: "*A barren rock with hardly a house upon it.*" If only he could see it today.

Hong Kong, I suggest, has from its beginnings, been the world port for the China trade. Also there is no question that Hong Kong will have an even greater role to play as the world port for a China that is taking its rightful place as one of the world's leading economies.

### **THE PORT**

Our port is more than just concrete wharves at Kwai Chung and a deep-water channel alongside. It is more than that now, and will be much more than that when our new port on Lantau gets under way in a few years time.

Quays, access channels, dockside cranes, are essential parts of a port, but only a part. But just as important is the software that supports the ships. By this I mean the shipping lines, the cargo, the containers and the people who keep them all moving. But it is also the banks, our telecommunications services, our

insurance and legal services, our education system, our whole way of life. It's also our world-wide reputation for reliability, dependability and stable economic and government systems that underpin that reputation.

These have combined in Hong Kong with the quirk of nature that has given us sheltered deep water at the mouth of a great river trading system. A quirk of history has also put us in close proximity to the world's most rapidly developing economies - both to the north in mainland China and in almost any other direction you travel within the Asian Pacific Region.

Those early traders who chose Hong Kong as their base were merely looking for a harbour close to China where their sailing ships could shelter from typhoons. They did not know, could not have known, that they were choosing the only port between Vietnam and Ningbo capable of accommodating the huge container vessels that are the mainstream of today's world trade at any state of the tide.

But their fortuitous choice, combined with the attributes of the port I have already mentioned have combined to make Hong Kong the phenomenon it is; the world's 10th largest trading economy and the world's busiest container port.

Hong Kong was founded as a port and owes its continued success to the growth and efficiency of its port. The port is our key economic asset. Yet, amazingly, few people in Hong Kong realise just how vital the port is to Hong Kong. It is generally regarded as a half necessary evil that jams our roads with container trucks wearing away equally our road surfaces and our nerves.

But remember, that it was the port that led to modern Hong Kong, it was the port that sustained our trade with China between the wars, it was the port that spurred our fledgling manufacturing industries in the 50s and 60s.

Today it is the port that:

- generates 15 percent of our GDP;
- leads to employment for 350,000 of our workforce; and
- handles 90 per cent of all our trade.

Not only our trade. Hong Kong's economy is now firmly, and irrevocably, enmeshed with that of southern China in general and with Guangdong in particular. As China has opened up to the world, Hong Kong's manufacturers have been quick to take advantage of cheaper land and cheaper labour in China and move their factories on to the mainland. But they have been equally grateful to make use of the established port facilities down river in Hong Kong through which to export their manufactured goods to the world.

Through Hong Kong passes some 42 per cent of China's exports. The rapid industrialisation of southern China, and particularly the Pearl River Delta, would not have been possible had not Hong Kong been the conduit through which raw materials and semi-manufactured goods poured into China's factories and completed products flowed out to world markets.

It is not only proximity that makes Hong Kong the gateway to China, but also efficiency. Time is money, and nowhere more so than in the shipping world. Like an aircraft, an intercontinental cargo ship makes its money when on the move. Time in port is necessary - cargoes have to come from somewhere. But the quicker a ship can berth, unload, load again, and be on its way, the better for the owner's bank account.

Given a choice shippers will call at the most efficient port. With its turnaround time of 14 hours, Hong Kong is among the most efficient in the world. Our pilots, our tug masters and our container terminals see to that. It is not just the action at the berths - it's an unique combination of geography, skill, determination and a government which knows when not to interfere.

Port efficiency and quick turnaround times are essential not only for shipping lines but also for manufacturers, importers and exporters. No matter how superior a factory's products may be, they are not making money until they reach their markets and are sold. It is the fact that goods ordered from overseas can be made and delivered in such a short time that has attracted buyers to Hong Kong and, more recently, to southern China.

So, here we have the world's busiest container port providing a substantial input to our GDP, a major source of employment and with every container passing through - domestic or re-export - adding value to our economy and wealth to our people. But apart from being a convenient conduit for trade, what does it give to China? Can they, indeed should they, rely on it, replicate it, or ignore it?

I think we can rule out the last of these options. It's hard to ignore the world's busiest container port, the world's biggest and perhaps most successful privately funded and operated port. Especially when it lies right on your doorstep.

## **REPLICATE OR RELY**

So, if China can't ignore us, how about copying us. What are the chances of Hong Kong being cloned. The answer to that can be found on any map of the China Coast. Today's king-pins of world trade, the intercontinental container vessels are enormous. You see them passing through the Lamma Channel every day. You rarely see them in Chinese ports. Why? Two key reasons. The

first is that most Chinese ports are not freely open to international trade. That can change. Second, the very size of these ships. They are twice as long as a football pitch and as tall as a block of flats. So port access must be straight, wide and deep and preferably available at all states of the tide. These essential requirements are rarely readily available.

True, some Chinese ports have these assets - Dalian, Tsingtao, even Ningbo. But some famous ports in China - Shanghai, Guangzhou - simply do not have the water depths to cater for the largest ships on which world, and increasingly, inter-Asian trade, depend.

But whether ports with the necessary facilities exist naturally or not the volume of trade originating within China will increase dramatically. In the past decade, China has experienced uninterrupted increases, averaging double digit growth annually. The Chinese economy is forecast to grow 8-9 per cent each year for the next 7 years. Guangdong will grow even quicker. This will require the opening of new ports, the upgrading of others and the implementation of major infrastructural schemes to move goods around the country - to and from the centres of production and consumption.

It is expected that more than 10 new container terminals, capable of handling a total of more than five million containers a year, will be built in China between 1995 and 2000. Overseas investment in China's ports in the last 10 years totalled more than 27 billion Hong Kong dollars. Tax cuts and other incentives have encouraged more investment and many companies, especially Hong Kong concerns, are entering joint ventures in China's port development. You may have read in the papers in October that a Hutchison Whampoa-led consortium has signed a 3.4 billion Hong Kong dollar deal to develop Yan Tian, just over the border from Hong Kong.

So there will be a spur to replicate Hong Kong's port in those areas which have a natural industrial hinterland, plus the necessary deep-sea approaches. But where are these areas? Ningbo is clearly one, and one well outside Hong Kong's natural hinterland.

Yan Tian, just to our east, and Gaolan, to our west, are other likely candidates. Both have great, long-term potential; but both have a long way to go to realise that potential. It is significant that the recent Hutchison Whampoa deal to develop on Yan Tian is for 50 years. It is certainly not a short-term project. Some fear that Yan Tian may somehow attract cargoes that are 'rightfully' ours and take the economic benefit which would otherwise accrue to Hong Kong. They fear we could not take competition. I do not share these fears. Southern China needs additional ports - those ports will stimulate growth. That's good for China; and good for Hong Kong. The additional shipping traffic in our area will increase the chance of additional shipping calls



at Hong Kong and enhance our maritime support services. Any additional spur to competition can only be good for Hong Kong; we thrive on competition now; more competition will improve standards of service.

So I welcome the development on Yan Tian as I welcomed the earlier development of Shekou container terminal in Shenzhen. She Kou is comparatively small; and expanding it greatly will not be easy. Access is by tortuous deep water channels through Hong Kong. Let's not forget also that if China's trade continues to grow at anything like recent rates, Hong Kong's port alone will not be able to cope.

Let me add to what I said a moment ago and highlight a few more bonus points for Hong Kong - a port is more than deep water and a concrete dock. A port is a place where a shipper can gain access to the services that will get his goods to the market on time. No hassle, no fuss, but with absolute certainty. A shipper in Hong Kong, or in our natural hinterland in China, knows that once he gets his goods to the Hong Kong port they will leave that day on a ship bound for the States or Europe or wherever.

They will meet the connecting train to market in Chicago or Hamburg and that every step of the way he is covered by internationally accepted standards of insurance, carriage and, importantly, service. Should anything go wrong, any of the agencies who provide that cover are contactable by telephone or fax from any major city. It will take some years for those standards to be replicated in Chinese ports. Until these standards are replicated most international container ships with cargoes to or from southern China will tend to use Hong Kong.

As Chinese ports improve and expand, more international lines will use them. That is as it should be, but rather than taking trade from Hong Kong, these ports will be helping us to handle the trade that China must generate in order to realise its economic potential. So, in practice, demands on our port will continue to grow; we must continue to expand to match them.

In practice that will mean that Kwai Chung terminals will have to operate at full capacity for the foreseeable future. It will mean that we must continue to improve road, rail and river access, improve standards of productivity and be ever alert to changing patterns of trade. It is disappointing that we still await endorsement by the Chinese side of CT9. Let us hope that we do not have much longer to wait.

It also means that our ambitious plans to construct a totally new port on Lantau must proceed. Our port master plan has been developed. It will cater for port expansion well into the next century. We envisage a need for some 17 new container berths by 2011 - our plans provide for up to 24. Planning work has already started on terminals 10 and 11, the first to be built at Lantau. These

will give us an additional eight berths by the year 2000, with the first berths at Terminal 10 coming on stream in 1997 when the Tsing Ma Bridge will open, connecting the new port, and the airport, to the urban centres. In terms of throughput we expect total volumes of cargo to double by the end of this century - and double again by 2011.

So replicating Hong Kong's port will be something of a task. We are a moving target. We aim to keep ahead of the game.

But, make no mistake about this, should China's economy expand as we all predict, and hope, for it will mean a better life for so many mainland people, then expanding Hong Kong's port will not be sufficient. Additional ports will inevitably be needed. As you can see by the billions being invested by overseas entrepreneurs, some of these ports are being built or planned. But with Hong Kong having so much of a lead, it seems to me fairly clear that these ports will be largely complementary to Hong Kong.

To some extent they will be competitive, seeking to attract shipping lines, shippers and supporting services. But that can only be good for us. Hong Kong is keen to promote competition between cargo handlers whether at container terminals or in mid-stream. Competition is good for us and our businessmen will know how to respond.

## **OUR HINTERLAND**

Hong Kong was founded as an entrepot for the China trade and for most of its history that is how it survived and prospered. The closing of the China trade in the early 50s happily coincided with the growth of Hong Kong's manufacturing industry. So the port was kept busy importing raw materials for the booming factories and exporting their produce. The reopening of China to world trade has brought the wheel full circle. Hong Kong is once again a thriving entrepot for China trade. Cargoes from China account for between 65 and 80 per cent of Hong Kong's total export air freight and sea freight volume.

It was Napoleon who said: "Let China sleep, for when it wakes the world will tremble." Well, China has awoken, and if the business world is trembling it is with excitement at the commercial possibilities that awakening brings. Hong Kong is in the happy position of being the threshold of, and the only major developed deep-water port for a quarter of the world's population. And it is a quarter that has not even begun to realise its true potential. That potential is limitless and, with proper planning, Hong Kong, can play a pivotal role in helping China realise it.

But being on the edge of such a huge and potentially profitable hinterland means nothing unless that hinterland is accessible. Much of it still is not easily

accessible. In many places, China's infrastructure has not kept up with its rapid industrialisation.

All fields tend to have jargon and buzz words and one of the buzz words in the shipping field just now is Multimodal. What it means simply is the ability to use whatever convenient transport means are at hand to move freight. For instance, in the United States containers can arrive by ship, be loaded on to special trains that will carry them halfway across the continent where they may well be loaded on to a barge, shipped part way down the Mississippi and complete their journey by road. That sort of multimodal transport is not yet available in China. But it is being planned. Vast sums are being spent on upgrading mainland roads and railways. An example close to home is the Shenzhen-Guangdong Highway now under construction. These improvements will mean that cargoes from even deeper in China can be shipped direct to Hong Kong.

Both the Kowloon Canton Railway Corporation and the Government have produced recent studies looking into the building of a dedicated spur line to serve Kwai Chung with a later branch going to the new port at Lantau. For if there is no multimodalism in China, in truth there is little in Hong Kong, we must be one of the few major ports not served by a direct rail line. Once such a line is built, connected to China's improved rail system, it will extend Hong Kong's hinterland from Shenzhen to Siberia, from Mongkok to Mongolia.

Such a rail link would also relieve some of the road congestion caused by moving containers by lorry to and from China. Another means of moving containers is on the Pearl River itself. Some are already shipped by barge, but not nearly enough. Studies are underway on the feasibility of introducing the huge barges like those seen on the river Rhine to make use of the natural highway that is the Pearl Estuary. Dedicated river trade terminals are being studied as part of the new port to cater for traffic coming by river.

## CONCLUSION

Predicting the future in any detail is a very inexact science. But most pundits foresee massive growth ahead for China's industry and commerce. It is up to Hong Kong to ensure that it plays a vital part in nurturing that growth and that we in turn benefit from it.

So fast has been the growth of the region that people have drawn future parallels with the highly developed eastern seaboard of the United States. If this happens, then with the proper planning Hong Kong can be the New York of the Pearl River Delta.

This is not just some fanciful dream, but a very real possibility. To make it a reality requires, careful planning, hard work and the courage to have confidence in the future. Hong Kong is already China's World Port. I am confident that it will remain so well into the next century.

## **INTER - AND INTRA-REGIONAL RAILWAY LINKS - Railways and China's Deep Hinterland**

*Kevin HYDE*

### **INTRODUCTION**

Ever since the inauguration of the Kowloon-Canton Railway in 1910, the Railway has been a vital link in terms of both passenger and freight traffic between Hong Kong and China - as its very name suggests.

Growth was relatively slow, however, until the 1980's, when China's open--door policy, formulated in the late 1970's, went into full swing. With the development of new towns in the northeast New Territories, patronage soared from 190,000 a day in 1983 when the KCR was electrified, to 560,000 a day at present - a threefold increase in less than a decade .

In the meantime, the passenger through train service between Kowloon and Guangzhou (Canton), suspended in 1949, was reintroduced in 1979. One pair of trains was run at first, but the service was progressively expanded, with four pairs a day presently plying the route between Kowloon and Guangzhou, and one pair between Kowloon and Foshan. Passenger volume also increased from a total of 900,000 in 1979 to 2.7 million in 1992.

On the freight side, however, the development has not been so dramatic. In the past decade, the number of freight trains running along the KCR has remained at around 12 pairs a day. Freight tonnage has increased from 2 million tones from China to Hong Kong (inbound) and 180,000 tones from Hong Kong to China (outbound) in 1983 to 3.5 million tones inbound and 1.1 million tones outbound in 1987, but since then there has not been significant growth due to growing competition from other modes of transport and KCR's own capacity constraints.

## **INFRASTRUCTURE DEVELOPMENT IN CHINA**

Rail has long been the backbone of China's transport infrastructure, both for passenger and freight. There are currently 56,400 km of railways in China linking the vast majority of cities and towns, and also over 4,400 freight yards.

The Chinese Government recently reiterated their policy of giving top priority to the development of rail. To substantiate this policy, China is pooling vast resources to build a new railway trunk line between Beijing and Shenzhen via Jiu Jiang. Obviously, this line will hold tremendous opportunities for Hong Kong, as huge volumes of freight will arrive at the threshold of the territory, and passenger railway service all the way to Beijing will become much more attractive to the people of Hong Kong, particularly when a premium service is offered.

## **STUDIES BY KCRC AND THE HONG KONG GOVERNMENT**

In late 1990, KCRC started a comprehensive freight review which concluded that the amount of potential freight traffic between Hong Kong and the mainland provided ample justification for building a new freight line connecting the Chinese railway network to Hong Kong's container port at Kwai Chung.

Meanwhile, a review of KCRC's international passenger businesses made it clear that a new line should cater for cross-border passenger traffic as well as freight. With commuter trains running along the line, this railway would also become an urban link connecting the northwest New Territories with urban Kowloon.

These findings were very much in line with the Railway Development Study (RDS) carried out by the Hong Kong Government and published in April 1993. The Railway Development Study recommends that the highest priority be given to the construction of a new mixed railway connecting western Kowloon and Kwai Chung with Yuen Long and the Chinese border. Broadly speaking, KCRC's findings agree with the RDS in terms of freight demand, passenger traffic, alignment and investment cost.

## **IMPORTANCE OF THE HONG KONG PORT TO CHINA**

### **Fast growth in China's Inland Provinces**

Export from China grew at an average rate of 18% per year through the second half of the 1980's, 5% faster than the overall industrial output.

KCRC's source of freight primarily comprises China's inland provinces - - which actually account for 75% of KCRC's incoming cargo. Coastal provinces are a secondary source, accounting for 25%, although the Guangdong Province contributes practically nothing. KCRC's "rail-eligible" freight market can therefore be defined as the inland provinces and the time sensitive fraction of shippers located on the coast.

According to the Almanac of China Foreign Economic Relations and Trade 1992-1993, the inland provinces of China accounted for 23% of all Chinese exports and imports in 1991.

### **Hong Kong and South China Ports**

China's container trade amounted to about 6 million TEU's (twenty-foot equivalent units) in 1992, over 75% (or 4.5 million TEU's) of which was handled through Hong Kong. All of China's ports combined handled only about 1.5 million TEU's, compared to Hong Kong's nearly 8 million TEU's.

Despite the importance of Hong Kong's Container Port, it is not without threats, however. As traffic volumes build up, some of the largest ports in China will have the potential to handle direct calls from long haul liners. This means that these ports would no longer feed Hong Kong, but would capture feeder traffic from smaller ports located in their proximity. The success of these ports will be dictated not only by the quality of their terminal facilities, but also by the quality of their supporting land infrastructure, including rail and road, and also their ancillary services, ranging from logistics-related services to trading, insurance and financing -factors in which Hong Kong will continue to have a significant advantage.

However, Hong Kong also has its crippling restraints. Due to the fact that passenger traffic enjoys priority over freight on the KCR, the ability to absorb more incoming cargoes from China is quite limited. Meanwhile, border congestion and the limited road system in Hong Kong have also led to increasing difficulty in feeding cargo to Hong Kong's port. Partly because of this difficulty, there have been recent efforts on the part of China to develop alternative ports in the Pearl River Delta, particularly in Shekou and Yantian in the western and eastern parts of Shenzhen respectively. Like Hong Kong, these ports will benefit from the same infrastructural developments in China, particularly:

- The second Beijing-Kowloon (Shenzhen) railway, scheduled for completion in 1995.
- The upgrading of the Guangzhou-Shenzhen line, designed to relieve the current levels of congestion, expected to be ready in 1994.

Both Shekou (comprising the ports of Chiwan, Mawan and Shekou itself) and Yantian are designed to be served by railway lines branching out from Ping Hu to the north of Shenzhen city.

Given the expected size of the market, the investment in place at Kwai Chung and the efficiency of Hong Kong as a port, it is likely that the neighbouring ports will complement rather than compete with Hong Kong, as long as Hong Kong's transport infrastructure can accommodate the growth in traffic.

There is, however, a possible threat from Taiwan. Currently, Taiwan cannot attract China's transshipment cargo coming through Hong Kong. However, should the relationship between China and Taiwan be normalised, then it is likely that freight traffic will move directly between mainland Chinese ports such as Xiamen, and Taiwanese ports such as Kaohsiung, rather than via Hong Kong. In addition, Taiwan could attract significant transshipments that currently come through Hong Kong, particularly to and from China's east coast.

### **BASE CASE PROJECTIONS IN CHINA-HONG KONG FREIGHT TRAFFIC**

We have evaluated several scenarios to estimate the range in size of Chinese re-export transshipments in Hong Kong. To assess the financial viability of a railway line from the Chinese border to the Kwai Chung container port, a base case was derived using the following conservative but realistic assumptions:

- Chinese foreign trade will grow at 10% per year for the rest of the decade.
- Taiwanese ports would capture most of the China-Taiwan trade and some transshipment traffic from Hong Kong.
- Chinese transshipments in Chinese, Korean and Japanese ports would grow at the same pace as overall Chinese trade.

As a result, Hong Kong's share of China's container trade would be reduced from 75% today to slightly over 50%, translating into 6.2 million China -related TEU's by 2000. Importantly, because Chinese ports and Taiwanese ports would primarily attract traffic from China's east coast provinces, Hong Kong's hinterland would become concentrated on Guangdong and the inland provinces, especially those located along the two Beijing-Kowloon railway trunk lines.



Containerisation in China has so far been limited to the proximity of the ports. Traditionally, inexpensive labour and scarce capital justified the preference of extensive manual handling of cargo to the development of a door-to-door intermodal network. These economics, however, are rapidly changing. The costs of labour, land and storage are soaring not only in Shenzhen, but in the Pearl River Delta on the whole, and there is now strong justification for the spread of containerisation to the inland provinces. Hence, in view of the Ministry of Railway's strong support for the development of intermodal operations, coupled with the expanded rail capacity when the second Beijing-Kowloon Railway is commissioned in 1995, the construction of adequate facilities is expected to be a primary area of emphasis for the rest of this decade.

### **NEED FOR A PORT PASSENGER LINE**

Hong Kong's container port in Kwai Chung is one of the very few (if any) major ports in the world without a direct rail link. Current traffic capacity on the KCR has not been able to keep up with China's export growth and the present practice of using trucks and barges to move rail cargo to Kwai Chung has led not only to increased congestion on the roads and in the harbour, but also to loss in time and efficiency. Hence the construction of a direct railway leading to Kwai Chung is of vital importance.

### **Base Case Rail Projections**

With a direct railway to the Kwai Chung Container Port, it is assumed that KCRC would capture an 11% market share of the China-Hong Kong freight market in the year 2000, as opposed to 8% today. It is also projected that market share would gradually grow to 15% in 2010, when the Kwai Chung rail terminal would reach its capacity of 980,000 TEUs per year. This is already conservative in view of the estimates of both KCRC's Freight Study and the Government's Rail Development Study.

In the northbound direction, the proportion of laden containers is expected to increase from about half in the early years to around two thirds by 2010 and beyond. In terms of pricing, the charges will be set so as to be directly competitive with trucks that work on a Guangdong railway yard-to-port basis.

## **PASSENGER TRAFFIC ON THE PORT PASSENGER LINE**

### **Local Passenger Traffic**

Residents in northwest New Territories have long been pressing for a rail link to urban Kowloon, because of the present congestion of road traffic especially on the Tuen Mun Highway. Journey times between Tuen Mun and urban Kowloon can be well over 90 minutes, and considerably more to Central.

Route 3, a dual three-lane highway linking Route 2 at Au Tau through to Tsing Yi via a tunnel and the future Ting Kau Bridge, is anticipated to be opened by 1998. This will provide a more direct route for bus services between northwest New Territories and Kowloon. However, the build up of port related traffic and the development of northwest New Territories will rapidly increase the traffic volume on Route 3, which is expected to reach capacity before 2011.

On the other hand, a rail link would significantly reduce journey times. A railway from Yuen Long to west Kowloon would put the two places within 17 minutes of each other, and assuming a reasonable interchange with the Lantau Airport Line, Central District would be merely 25 minutes away from Yuen Long.

The forecast demand on the urban rail link from Yuen Long to Kowloon is in the range of 223,000 to 337,000 per day in 2011 (projection from the Government's Second Comprehensive Transport Study and the Railway Development Study respectively).

### **Cross-Border Passenger Traffic**

#### ***Local Cross Border Trains***

In 1992, a total of 35 million (or an average of 96,000 a day) cross-border passengers took KCR electric trains to and from Lo Wu. The average annual growth rate for the past eight years (1984 to 1992) was about 13%.

The projections on passenger growth by KCRC, Hong Kong Government's Railway Development Study and the Shenzhen Planning Institute vary. KCRC's projection, which is slightly higher than RDS but considerably more moderate than the Shenzhen projection, is for an average 8% to 9% annual growth from 1992 to 2000.

According to KCRC's forecast, Lo Wu Terminal's capacity will be exceeded by 1995. Hence, a second rail border-crossing is needed from Hong Kong's viewpoint. The situation is similar on the Shenzhen side. Apart from the limited throughput capacity at the Shenzhen Immigration Terminal, the

passenger flow is impeded by the capacity of the streets and the connecting transport facilities.

The choice of site for the second border crossing checkpoint at - Lok Ma Chau on Hong Kong side and Huanggang on the side of Shenzhen - has been consistent between China, the Railway Development Study and KCRC. The site is close to Futian District, which is the future focal point of Shenzhen City. Future development of Shenzhen is towards the west and the Pearl River Delta region. Furthermore, there is a plan for a Shenzhen metro system to connect to Huanggang, where the easy transfer of rail passengers would be possible.

### ***Through Trains***

China is currently expanding its existing national railway network by building new routes, double-tracking, electrification and other forms of capacity enhancements, in order to cope with the country's economic growth. One such project that has had a significant effect on KCRC is the construction of an third track between Guangzhou and Shenzhen North, permitting speeds of up to 160 km per hour.

The existing through train services between Kowloon and Guangzhou/Foshan carry about 3 million passengers a year. They are operating at or near capacity and it is known that around 5 million passengers per annum take the KCR trains to Lo Wu and then the Guang-Shen Railway to Guangzhou. Hence, KCRC believes there is great potential for further developing the through train services to Guangzhou and other destinations. However, the operation of local electric train services on the KCR restricts both the capacity and speed of the through trains, and furthermore the terminal facilities at Kowloon Station are inadequate and limit the maximum service frequency to around one through train per hour.

In the long term, however, KCRC envisages that a network of through train services will evolve, with a possibility that some could use the new Beijing-Kowloon line. These will include the introduction of modern rolling stock, higher frequencies and better overall customer service. A new terminal will also be required in the long term, and a possible site is proposed on the West Kowloon Reclamation, which could have an interchange with the Lantao Airport Line. Other sites within west Kowloon will also be investigated.

KCRC is at present having discussions with the Guangzhou Railway (Group) Corporation about the introduction of a brand new through train service with a level of quality comparable to airlines. While different options are still being explored, it is envisaged that the new service, very possibly using double-decker trains, will bring about an eightfold increase in capacity.

To meet the shorter term need to upgrade our international service,

Kowloon Station will be renovated and physically enlarged to provide air-conditioned services to international passengers. With the construction of a light-weight canopy, the waiting area will have adequate space to hold a train-load of up to 1,600 cross-border passengers.

## **CONCLUSION**

Hong Kong is the largest container port in the world. Yet ironically it is presently not served by a direct rail linkage with its hinterland. This drawback is already causing problems both in market competition and in terms of the burden on the existing road network.

On the passenger front, the call for an efficient rail link between the northwest New Territories and urban Kowloon has been loud and clear, and there is also great demand for more through trains between Hong Kong and China. Hence, the construction of a freight passenger line linking the Chinese border with the Kwai Chung Container Port and urban Kowloon is of critical importance, and KCRC, with its robust financial background, good relationship with China and rich experience in running a mixed railway, is in an excellent position to be involved in this important development, while upgrading its existing railway to the highest international standards.

## **AVIATION RELATIONS BETWEEN HONG KONG AND CHINA AFTER 1997**

*Howard YOUNG*

### **INTRODUCTION**

This paper concentrates on building tangible links between Hong Kong's and China's development.

When we discuss the development of China's regional aviation network, I can afford to concentrate on Hong Kong only. This is because Hong Kong will become a Special Administrative "Region" of China on 1st July, 1997. In addition, more and more people are coming to realise that Hong Kong's role in the overall development of China and Asia in the next century is that we will play a twin regional role: domestically a powerful business and financial support base of China, and internationally, a dynamic regional business centre in the Asian region on behalf of China.

This vision is spelt out in the study published in May this year by the Business and Professionals Federation of Hong Kong entitled "Hong Kong 21", a document that I would recommend to the readers.

### **AIRBORN TRANSPORTATION OF HONG KONG**

When Hong Kong University was founded 80 years ago, the territory was already building itself up as a major trading centre. Its main natural advantage, along with a fine harbour, was its geographic position on shipping routes between Japan and Shanghai to the north and Singapore and beyond to the south.

No-one imagined at that time that Hong Kong -- or anywhere -- would become a hub for airborne transportation. But it has, to the extent that the territory now has one of the busiest airports in the world and is home to one of

the most successful airlines. In terms of international passenger traffic in 1992, Kai Tak handled 22 million passengers, and in that sense was the largest in Asia and fourth in the world after Heathrow of London, Frankfurt and Charles de Gaulle of Paris. In terms of cargo, Hong Kong is third in the world after Narita of Tokyo and Frankfurt, handling close to 1 million tons of cargo.

Concerning the relations between China and Hong Kong in the field of aviation after 1997, I am slightly reluctant to emphasise that particular year, because certainly for us at Cathay Pacific, it is just a date on the calendar -- and not much more. Let me start by explaining why.

The Basic Law, Hong Kong's post-1997 constitution, specifically allows for Hong Kong-based airlines to continue operating. It authorises the Special Administrative Region's government the right to continue running civil aviation in the same manner as it does now, and that includes negotiating air services agreements with foreign countries, maintaining a separate register of aircraft and so on.

1997 is a big date for aviation in Hong Kong, because that is when the new airport at Chek Lap Kok is scheduled to open. To be realistic, it might actually open a bit later than that, but I am sure even the most pessimistic of persons will agree that Hong Kong needs a replacement airport and that it will be built.

It will make a huge difference to the aviation business here, and to Hong Kong generally. It is an investment that will bring us big returns. Simply by providing desperately-needed capacity, it will be a major boost to our, and probably China's, tourism trade. It will fuel the Tourism industry which I represent in Legislative Council. That industry attracts 7 million overseas tourists a year plus about 1.5 million visitors from mainland China to Hong Kong and provides employment for well over a hundred thousand people and earns 40 Billion dollars in foreign exchange for Hong Kong, making it the second largest earner textiles.

So where will Hong Kong stand as a Chinese city in the aviation business?

There has been a substantial increase in travel to and from, and within, China over the last few years. Anyone who has tried to book a flight to China at short notice will know that there are simply not enough seats to meet demand.

The demand will continue to grow, and all the signs are that China's airlines and airports will be unable to catch up for some time to come. They can't train pilots and maintenance crews fast enough; they can't build airport terminals fast enough, and they can't train aviation managers fast enough.

Although aviation is traditionally considered a sovereign matter by most countries, the trend across the industry is for less regulated and less nationalistic regimes. To take one example, British Airways owns 25% of

Qantas.

If you think of the sectors of China's economy that have opened up, or are opening up -- retailing, manufacturing, banking -- then it is reasonable to assume that the country's aviation industry will also become more receptive to external involvement.

Indeed, it will have to, if it is to catch up with all that growth in demand. We are already seeing some signs of this. One mainland airline has been reported as hiring foreign pilots, and in my company, Cathay Pacific, we are looking at a range of investment opportunities in helping to operate various airport services in Chinese cities. We are also starting to help train mainland airline personnel. Our associate, Hong Kong Aircraft Engineering Company, is building a large maintenance base in Xiamen, and will be training hundreds of mainland engineering personnel here in Hong Kong to work at this new facility.

Think ahead to the end of the 1990s, and it is quite possible that there will be non--Chinese shareholdings in some Chinese airlines, airport service companies and so on. It is also quite possible -- indeed, quite likely -- that direct air links will exist between Taiwan and the mainland. In other words, the Chinese air transport industry will be substantially bigger than at present.

## **AVIATION RELATIONS BETWEEN HONG KONG AND CHINA**

Hong Kong's aviation relations with China will, I suspect, look something like this.

Dragonair, which is largely owned by Cathay Pacific and CITIC, China's overseas investment corporation, will continue as the Hong Kong airline that flies to Chinese cities. These will after 1997 be domestic routes, in some ways, but I have little doubt that there will be plenty of competition from mainland-based carriers.

With any luck, the Chinese authorities will allow Dragonair to mount more capacity on its mainland routes. At present, mainland carriers have far more flights, and it is a struggle for Dragonair to get permission to raise frequencies or open new routes. It is basically a form of protectionism, but with demand so high, and Chinese airlines unable to meet the demand, it is certainly damaging China's tourism trade. This also applies to the carriage of cargo, which at the moment is effectively off-limits to Dragonair.

Cathay Pacific will, of course, remain Hong Kong's leading international airline. Although Cathay does not fly to the mainland, we are already seeing the mainland flying on Cathay Pacific. This year, some eight to ten percent of our passenger revenue here in Hong Kong has been from Chinese leisure and

business travellers. This proportion will surely grow, as an increasingly affluent middle class emerges in China, and business expands between China and elsewhere. Our current guess is that third percent of our passenger revenue will be from mainland travellers before the end of the decade.

Where freight is concerned, the proportion is likely to be massive. Even now, some seventy percent of Cathay Pacific's Hong Kong cargo revenue is from freight coming from the mainland. That figure could easily rise to ninety percent or more by the end of the decade.

I have already mentioned Cathay Pacific's investments in aviation-related businesses in China. We have defined a basic approach to China. We see opportunities for cost-savings, for increased revenues from mainland traffic. We see opportunities for cost-savings, for example by having some of our maintenance work done at Xiamen and doing our revenue accounting work in Guangzhou. And thirdly, we see opportunities for investment: involvement in, for example, managing airport services on the mainland.

On the subject of airports, there will be plenty of those facilities in the Pearl River Delta region by the year 2000, but not an unreasonable number. Hong Kong's new airport at Chek Lap Kok will be the region's Heathrow, while others will all have their uses. The comparison with Southeast England is quite a good one -- both areas have a substantial population base, and both are international crossroads. The difference is that southern China is enjoying a booming economy!

It is impossible to discuss aviation relations without mentioning government agreements and regulations. This is a highly technical area, but it will directly affect all the other areas I have mentioned.

While the Basic Law says that Hong Kong will retain its current autonomy, the change of sovereignty means that Hong Kong has to amend its existing air services agreements with other countries. Currently these ASAs are signed between other countries and the UK. After 1997 they will be signed by Hong Kong, under "specific authorisations" from China.

This means that China must agree to each ASA after 1997, just like in the past Britain had to not only agree, but negotiate all ASA's on behalf of Hong Kong before 1997. But in the meantime Hong Kong needs to replace all its existing ASAs by mid-1997, and we are unfortunately seeing a reluctance by China to approve the new agreements in a timely manner. This seems to be related to the fact that the Joint Liaison Group seems to doing not much recently in a timely manner. It is a matter of judgment whether this stagnation is the result of obstacles created by the arguments between Britain and China on constitutional changes during the current transition. After 1997, there should be no more Sino-British arguments over the transition. After 1997,



Hong Kong will be dealing with the central government directly instead of through a colonial intermediary. I would expect ASA approvals then to be granted as a matter of course, and also for the balance between mainland airlines and Hong Kong airlines on the routes between here and other Chinese cities to be more equally balanced than now.

Despite only 10 out of a targeted 24 ASA's having been signed so far, this has yet not caused many major difficulties in the operation of air services out of Hong Kong. The delay is just another reflection of delays in the dispute between the UK and China over political development in the territory. Hopefully the two sides can come to an agreement soon. Even if they can't, we should emphasise Hong Kong people's desire to separate political and economic issues so that life can go on as normal as possible, or at least most important of all, so that we can get on with business. After all, business, including aviation, is what Hong Kong's success is all about.



## HONG KONG AND CHINA'S TELECOMMUNICATIONS NETWORK

*John URE*

### CHINA'S TELECOMS NETWORK

The total exchange capacity of HongKong Telecom by the end of March 1993 was 3 million lines, of which 2.8 million were lines in service, or 48.5 per 100 population. And for every telephone line there are approximately 1.3 telephones in Hong Kong, or 63 telephones per 100 population.

By contrast, China Daily 15 January 1994 reported China as having just 2.5 telephones per 100 population. According to the annual reports of the MPT (Ministry of Posts & Telecommunications) the total exchange capacity of the public switched telephone network (PSTN) was 19 million lines by the end of 1992, but subscribers were only 11.5 million, or just under 60 per cent of capacity. The number of telephones in use was 18.9 million, or 1.6 telephones per main line, which compares with a ratio of 1.3 in Hong Kong. (Table 20-1)

Until very recently most subscribers in China were ministries and other state organizations, which would account for a high proportion of extension telephones. But this picture is changing very rapidly. In 1990 residents made up only 22 per cent of subscribers, but by 1992 their numbers had soared to 45 per cent. Subscribers classified as private or individual businesses are also rising, from 17 per cent to 21 per cent 1990-91. Most subscribers, about 80 per cent, are in areas designated as urban, which is average for low-income developing countries in Asia.<sup>1</sup> From these figures we can establish that the number of mainlines per 100 population, as defined by the number of subscribers, for 1992 was a lowly 0.97 compared with telephones per 100 population for 1992 of 1.63.

China, with a population 177 times larger than Hong Kong has an exchange capacity only 6 times greater. But within China the imbalance is also

marked. Our neighbour, Guangdong province, now has around 3.7 million lines in service, more than Hong Kong, almost one-third of all mainlines in China. Yet Guangdong's population of 63 million is only 5.5 per cent of China's total, which gives the province a telephone penetration rate (a 'teledensity' as the International Telecommunications Union - the ITU - calls it) of 5.8 mainlines per 100 population.

**Table 20-1 China's National Public Telephone Network**

	1990	1991	1992 (Millions)
Exchange Capacity			
PSTN	12.321	14.921	19.151
Of which:			
Urban	67.0%	69.2%	70.8%
Rural	33.0%	30.8%	29.2%
Main Access Lines			
Subscribers	6.851	8.450	11.469
Of which:			
Urban	78.6%	79.4%	80.3%
Rural	21.4%	20.6%	19.7%
Residential	22.3%	28.3%	45.1%
Business	77.7%	71.9%	54.9%
As Percentage of Capacity			
Subscribers	55.6%	56.6%	59.9%
Of which:			
Urban	65.2%	64.9%	67.9%
Rural	36.1%	37.8%	40.4%
Number of Telephones			
Telephones	12.735	14.990	18.888
Of which:			
Urban	80.6%	81.1%	81.8%
Rural	19.4%	18.9%	18.2%
Teledensity			
Capacity/100	1.08	1.29	1.63
Subscribers/100	0.60	0.73	0.97
Phones/100	1.1	1.29	1.61

**Table 21-1 China's National Public Telephone Network (continued)**

Radio-Telecommunications			
Pagers	0.44	0.88	2.22
Pagers/100	0.38	0.75	1.89
Mobiles	0.019	0.05	0.18
Mobiles/100	0.002	0.04	0.15

Sources : *Ministry of Posts and Telecommunications Annual Reports, China Statistical Yearbook.*

In the major cities penetration rates are higher. Xinhua reports in *China Daily* 8 February 1994 eleven cities with over 11 telephones per 100 population, headed by Haikou, capital of Hainan Province, with 25. Other cities include Guangzhou, Shenzhen, Beijing, Shanghai, Fuzhou and Kunming.

In fact, depending upon how we interpret the data provided above, by comparison with other Asian low income developing countries China has achieved at least the average teledensity relative to its Gross National Income, which the World Bank puts at US\$370 for 1991. I do not put too much weight upon the ITU's correlations between GNP per capita and teledensity, because while they tell you what the average between different comparable countries is, they do not explain the relationship between telecoms and national economic growth. But, for what they are worth, from the ITU figures we may expect China to have a teledensity of around 0.8 per 100 population.

## CHINA'S TELECOMS PLANS

What we can say is that China's mainline growth has averaged almost 20 per cent annually over the past six years,<sup>2</sup> and China is giving telecommunications top billing. I think the reasons for this are several. The Open Door policy has exposed China's industries to world markets and opened the way to foreign direct investment (FDI). Excellent telecommunications are essential for both. Also, China wishes to develop a capacity to manufacture telecoms equipment, to become more self-sufficient and to export. And then there are political and security reasons. Telecommunications can help centralize information in a country, and in an economy, which is vast, and often remote. China's leaders have also made it clear they want to modernize the military capacity of the country, and again modern computer-based communications networks are vital.

Since Deng Xiaoping's famous visit to the South in 1992, the MPT has accelerated its already ambitious development plans. Table 20-2 outlines key targets for the public switched telephone network over the Eighth (1991-1995) and Ninth (1996-2000) 5-Year Plans. These figures imply an annual growth rate for exchange capacity between the end of 1992 and 2000 of 23 per cent. The aim is to achieve teledensities of 2-3 per 100 population by 1995 (and 20 per cent in all major cities) and 5 per cent population by 2000 (30-40 per cent in major cities). Whether equipment suppliers can match these targets, and how this network construction is to be financed are still open questions.

**Table 20-2 Key Targets for the Public Switched Network**

	1991-1995	1996-2000
Exchange capacity	50 million	100 million
Telephone sets	36 million	78 million
Telephone Density	3 per cent	5-6 per cent
Toll trunk lines	520,000	1.4 million

But the aims are clear. National economic and social efficiency requires public access to telephones at reasonable cost. The more advanced sectors of industry, and the major users of telecoms services, including multinational firms, and the banking, retail, tourism, and transportation sectors, require data networks, private leased circuits, E-mail services, and so forth. The MPT is rapidly building a national optical fibre cable network radiating from Beijing, linking all major cities, although data speeds are currently restricted to 150 Mbts due to export prohibitions imposed by Cocom (the Co-ordinating Committee of Multilateral Export Control).<sup>3</sup> Using this network China will offer Chinapac, a public switched data network (PSDN) similar to Datapak offered by HongKong Telecom. Internationally, the MPT can offer international business data services from Beijing and Shanghai via satellite with technology supplied by Japan's KDD and AT&T of the USA. China and Hong Kong. And through the two high-speed optical fibre cables from Guangzhou (4 x 140 Megabit) and Shenzhen (565 Megabit) to Hong Kong, the MPT can route data and IDD traffic to Hong Kong, and to the world. This world, of course, includes Taiwan.

Traffic between Taiwan and Mainland China, which has been allowed since 1989, is routed variously through Hong Kong, Japan and the USA. It accounts for 13 per cent of Taiwan's international traffic, and according to an

MPT spokesperson quoted in Sing Tao 16-17 May 1993, Mainland traffic to Taiwan leapt by 83 per cent 1991-92. China accounts for nearly 50 per cent of Hong Kong's outbound traffic volume, of which nearly 80 per cent is to Guangdong province, mostly to Shenzhen, and accounts for around 30 per cent Hong Kong Telecom's international revenues. These figures are rising rapidly as China rolls out its own network. Hong Kong handles almost 60 per cent of China's outbound traffic. In 1991 Hong Kong sent 380 million minutes of traffic to China and received 340 million back.<sup>4</sup>

From a payments point of view China gains from this imbalance. By convention the sending country pays the receiving country for delivering the call. The accounting rate fixes the per-minute cost of the call between the two countries (not between the telecom company and its customers!) - for example, \$1 per minute - and the settlement rate fixes the proportion of this sum to be paid. Usually the settlement rate is 50 per cent. In the case of Hong Kong and China the accounting rate is high (and unpublished) while the settlement rate (also unpublished) is skewed very much in China's favour. It is usual for less developed countries, with low incomes and high tariffs, to have more incoming than outgoing traffic, so telecommunications becomes an important source of foreign currency earnings. Foreign companies in China will arrange for their head-office calls to be incoming. As far as possible residents arrange for their friends and relatives overseas to call them. For example, nearly all the operator-assisted calls to Hong Kong are reverse charge.

This means that after 1997 it is in China's interests to maintain an accounting rate regime with Hong Kong despite the fact that Hong Kong will be part of China. In line with the One Country Two Systems arrangement, the Joint Liaison Committee has agreed that Hong Kong will remain a signatory member of organizations like the ITU. But the Mainland's involvement in Hong Kong's telecommunications market is bound to grow. CITIC, China's State Council's international investment company, already owns around 20 per cent of Hong Kong Telecom (and 20 per cent of the Companhia de Telecomunicacoes de Macau), although it divested some of these shares in January 1994. I understand that Ji-Tong, a telecommunications corporation set up by China's Ministry of Electronic Industries (MEI), has set its sights on entering the Hong Kong market, and the Shanghai Long Distance Telephone Company has already done so through its 5 per cent shareholding in New World Telephone Ltd, one of the three new companies in Hong Kong to win a licence to compete with Hong Kong Telecom after 1995. So the Mainland's involvement in Hong Kong's telecommunications industry is bound to grow.

## **CHINA'S TELECOMS REFORMS**

This can be good for Hong Kong as long as it does not change the open nature of Hong Kong's market. It also raises the interesting question of whether Hong Kong operators of basic services (voice and fax) and value-added services (such as data, information services, E-mail, EDI) will be given the opportunity to enter the Mainland markets.

Dramatic changes are underway in China's telecoms industry. Until now the MPT has exercised the sole responsibility for planning, building and operating the public telecoms network. At the provincial level the Posts, Telegraph and Telephone (PTTs) administrations have been responsible, under the MPT, for local services. In recent years the growth of radio-based mobile communications, such as cellular telephones, pagers, CT2 and trunked radio, has been very rapid. For example, There are probably well in excess of 400,000 mobile telephones in use, half of them in Guangdong province. This has given opportunities to state organizations which have control over some radio frequencies, such as the Energy Ministry and the People's Liberation Army, to establish their own private networks, but also to come to local agreements with the PTTs to interconnect with the public network on a revenue-sharing basis. In this way the MPT's monopoly over telecommunications is being eroded. Now the State Council has agreed to the MEI's Ji-Tong Corporation to set up a radio and satellite-based data network. Ji-Tong, along with the Ministry of Railways and the Energy Ministry is a shareholder in the Lian-Tong Corporation which has also received State Council approval to start a long-distance services between major cities. Whether these services will include voice as well as data, and whether Lian-Tong develops into a competitor of the MPT, as seems inevitable in the longer-run, remain open questions at this stage. Another change widely anticipated is to separate the powers of the MPT to regulate the industry from its operational functions. This follows world trends in telecoms in preparation for having a neutral referee to oversee the introduction of competition.

But China's leaders have drawn the line at foreign direct investment in telecommunications networks or foreign involvement in the management of networks. However, at the fringes of the radio-mobile communications sectors some foreign investment and revenue-sharing seems to be taking place, disguised as equipment contracts. And it is likely that some Ministries with spare capacity on their private networks, and perhaps even some of the PTTs, would be favourable to foreign investment if it were allowed. But official thinking seems to favour something more resembling the Vietnamese model of Business Co-operation Contracts in which the foreign company offers investment, without equity, but a share in revenues.



## **HONG KONG'S TELECOMS REFORMS**

Hong Kong is opening up further as well. In 1995 HongKong Telecom's domestic monopoly over the network and basic voice services will be replaced by competition, and the newly-formed Office of the Telecommunications Authority (OFTA) has decided on issuing three licences to new entrants. Competition already exists in mobile services, and arrangements for Hong Kong people to take their mobile phones and pagers into the Mainland (known as 'roaming') and for citizens of the PRC to roam in Hong Kong are well established.

Besides voice traffic to and from China, HongKong Telecom is developing a range of other services, such as private leased circuits, credit-card calling, video-conferencing, calling-cards and 800-services where the call made from China is charged to a Hong Kong account. Other Hong Kong telecoms companies doing business on the Mainland include Champion Technologies, ABC Communications and Star Paging (pagers), First Pacific and Hutchison (mobile telephones), S.Megga and many other equipment suppliers. Other services beginning to appear between China and Hong Kong include information services, for example HongKong Telecom's ChinaLink provides online access to the Shenzhen Information Centre, and Reuters, Telerate and Knight-Ridder are now providing financial information from China's stock exchanges. Telecommunications links between Hong Kong and China will grow naturally, both through the spread of networks in China and rising traffic volumes, and through companies doing telecoms business between the two territories. Major users of cross border traffic will include air and sea transportation companies, travel agencies and hotels, property agencies, and so forth.

## **FUTURE ISSUES**

One area that does call for further review is the accounting rate and payments arrangements between China and Hong Kong. Basically people have to pay too much. Part of the problem lies in the lack of capacity in China on its international switches, but that is being tackled. As capacity increases, opening the way for further volume growth, tariffs should be reduced. Volume growth should protect China from any revenue loss.

But what will not happen in the foreseeable future is a Greater China Free Telecoms Zone embracing Mainland China, Hong Kong and Taiwan, an idea advocated by Dr Milton Mueller of Rutgers University.<sup>5</sup> Apart from any political problems, free trade in telecoms services would simply lead to refile,

that is companies in China, instead of calling the US or Canada or Japan or wherever directly, would lease circuits to Hong Kong and route their international calls from here. Similarly with incoming calls. China would lose very large foreign exchange earnings which would hamper their own network development.

Another development which is likely to grow is the movement of back-offices of Hong Kong's international companies into Southern China to take advantage of cheaper office rentals and lower wage costs. Telecommunications infrastructure is the pre-requisite for such a shift of location, and the demand for cross-border telecoms services will grow in consequence.

Finally, in my view we can expect further changes in China's telecoms sector after the current round of reforms have been carried through. And following the 1993 GATT agreement, the world's leading trading nations are now poised to negotiate further on GATS (General Agreement on Trade-in-Services) which includes the opening of telecommunications markets. But in the case of the PRC I suspect that the main drivers for change will come from the new entrants, the users and the PTTs in China rather than from outside lobbying.

## FOOTNOTES

1. *Asia-Pacific Telecommunication Indicators*, International Telecommunications Union, Geneva, May 1993
2. STATE STATISTICAL BUREAU of the PRC, *China Statistical Yearbook 1992*, Beijing, Table T12.4
3. The Co-ordinating Committee of Multilateral Export Control (CoCom) is also preventing China from obtaining access to digital mobile telephone encryption technology.
4. INTERNATIONAL INSTITUTE OF COMMUNICATIONS (IIC) (1992), *TeleGeography 1992*, London.
5. Milton MUELLER (1993), "Hong Kong as Telecommunications Entrepot? Hong Kong's International Telecommunications Policy and Regional Integration", Conference on Telecommunications and the Integration of China, Hotel Furama Kempinski, organized by Hong Kong Center of Economic Research, University of Hong Kong, 17 June 1993

**HONG KONG AND CHINA'S  
DEVELOPMENT -  
DISMANTLING INTANGIBLE  
BARRIERS**



## **HONG KONG AND CHINA - Regional and Economic Integration**

*George SHEN*

### **INTRODUCTION**

When the world economy suffered a brief recession in the early 1980s, the four little dragons of Asia that had emerged during the 1970s were also in a crucial stage of economic development. Slow down in export growth and rising costs were among factors which prompted governments and manufacturers to map out new policies and strategies. The ensuing decade saw many changes which in turn presented new challenges to all, but today these four little dragons remain among the world's most prosperous and vigorous economies. Their experiences may not have been the same, but thus far their development path seems to be in line with the Wild Geese Theory originated by Akamatsu in the 1930s, i.e., they have attained a higher level of development through a process of "importation of a new product -- domestic production -- export the same product". In other words, they have more or less followed a similar path as that of Japan, like wild geese following a leading goose.

It may be recalled that by the 1970s, Japan was already an advanced economy and was investing in foreign countries in the same way as the United States and some Western European countries. This state of affairs could be explained by a combination of the Akamatsu process and the Product Cycle Theory espoused by Vernon in the 1960s, viz., "importation -- domestic production -- export -- overseas investment". A characteristic of this process is the elevation of technology through research and development, thus enabling the exportation of more and more sophisticated products with higher added value. The four little dragon's experience may well fit into this pattern, but the Hong Kong case seems to be somewhat different.

There were two factors which distinguished Hong Kong's situation in the 1980s from Japan or the other little dragons. First, Hong Kong's domestic market for local products was very limited; second, Hong Kong was very weak in R&D compared to the other little dragons. Hence, Hong Kong was rather slow in elevating its level of technology and, faced with rising land and labour costs plus a political future which deterred industrialists from long term investment, was losing its competitiveness during the early 1980s vis-a-vis the other little dragons.

But the economic reform and opening up of China at that very juncture turned the tide in favour of Hong Kong.

One of China's important economic policy innovations first introduced in the late 1970s was the establishment of Special Economic Zones (SEZs) in the coastal region. Two such SEZs were set up in Guangdong Province, one in Shenzhen, just across the border from Hong Kong, and the other in Zhuhai, north of the Portuguese conclave of Macau, about one hour from Hong Kong by hovercraft. Foreign investments were encouraged through tax benefits, and the abundance of land and labour was too attractive to be ignored. Many Hong Kong manufacturers grabbed the opportunity in the early 1980s and moved most of their production operations to the SEZs. The result was drastic reduction in labour costs, thus rendering their products internationally competitive again. In other words, Hong Kong found a hinterland in the SEZs of Guangdong Province right on its doorsteps and, although Hong Kong industrialists had started to invest overseas, yet the advantages of processing products in China were so overwhelming that the scale of overseas investment was soon eclipsed by the "northern exodus" of manufacturing operations.

Thus Hong Kong's development path may be described as a modification of the Akamatsu-Vernon process in that, instead of "importation -- domestic production -- export -- overseas investment", it has been "domestic production for export -- investment in the hinterland (China) -- extension of manufacturing operations to adjacent localities -- expansion of export". Instead of moving production operations overseas, Hong Kong merely expanded its manufacturing industries across the border to where in 1997 it will eventually be a part thereof. Such a path has many ramifications, but they all lead to one phenomenon -- the integration of the economies of Hong Kong and South China and even some other regions in China. Let us look at some of the notable aspects in the course of integration.

## STRUCTURAL CHANGE IN HONG KONG

The shifting of manufacturing operations to China in the 1980s brought about a change in Hong Kong's economic structure. This in turn had an important impact on employment, causing a significant decrease in the number of persons employed in the manufacturing sector, while at the same time leading to an increase of employment opportunities in the service sectors such as trade, transport, communications and financing. In 1980, the manufacturing sector's contribution to GDP was 23.8 per cent, but by 1990, the share dropped by 7.1 percentage points to 16.7 per cent, with a further drop of 1.2 percentage points to 15.5 per cent in 1991. During the same period, the number of persons employed in the manufacturing sector dropped from over 943,100 or about 41.2 per cent of the total number of persons employed to about 759,100 or 27.7 per cent in 1990. This was followed by further drops to 656,000 and 571,000 in 1991 and 1992 respectively.

In the meantime, the share of GDP contribution by the service sectors witnessed a rise. For instance, the combined GDP share of wholesale, retail and import/export trades, restaurants and hotels, transport, storage and communication, financing, insurance, real estate and business services was 52.3 per cent in 1980, with about 714,700 employed persons or around 31 per cent of total number of persons employed. By 1990 it contributed to about 54 per cent of GDP, with more than a million employees or 43.5 percent of the total. By 1991, the service sectors' contribution to GDP reached 58.1 per cent. Table 21-1 compares the changes in GDP share and employment of the manufacturing and service sectors.

**Table 21-1 GDP Shares and Employment - Manufacturing and Service Sectors**

	1980	1990	1991
<b>Manufacturing</b>			
GDP Share (%)	23.8	17.2	15.5
No. of Employed Persons (1,000)	943.1	759.1	656.0
<b>Services</b>			
GDP Share (%)	52.3	54.0	58.1
No. of Employed Persons (1,000)	714.7	1,169.0	1,215.0

Source: *Census and Statistics Department*

This shift in employment resulted in rise in wages. According to the latest figures released by the Census and Statistics Department, nominal wages increased by 253 per cent during the period 1982-1992, and the real wage index stood at 115 in 1992 with 1982 as 100. Hong Kong's per capita GDP in current prices stood at HK\$127,778 in 1992, whereas in 1980, it was less than HK\$30,000. If the 1970s saw Hong Kong emerging as a newly industrializing economy, then by now Hong Kong has surpassed many developed economies in terms of per capita GDP, and the cause can be attributed to the expansion of its manufacturing sector into South China.

Hong Kong's domestic exports used to enjoy high rates of annual increase in the past, but the manufacturing boom in the Guangdong SEZs soon put an end to such growth. Instead, reexports surged to become a main feature of Hong Kong's external trade. It was in the latter part of the 1980s that reexports first exceeded domestic exports, and figures since then have clearly indicated that the most significant increases have been reexports to China, Western Europe and the United States. Moreover, Hong Kong's stagnant and decreasing domestic exports to Western Europe and the United States since that year have further demonstrated the effect of shifting manufacturing operations from Hong Kong to China. Table 21-2 gives some figures to this effect.

**Table 21-2 Value of Re-Exports to Major Markets (HK\$ billion)**

	1987	1988	1989	1990	1991	1992
Western Europe	20.9 (50.6)	34.1 (56.1)	48.9 (53.3)	74.2 (54.8)	99.0 (56.6)	120.4 (49.1)
United States	32.5 (72.8)	49.5 (72.9)	72.0 (72.2)	87.8 (66.4)	110.8 (62.9)	148.5 (64.6)
China	60.2 (27.9)	94.0 (38.0)	103.5 (43.3)	110.9 (47.5)	153.3 (54.4)	212.1 (62.0)

Figures in ( ) are domestic exports

This shift has also strengthened Hong Kong's role as a service centre because, in addition to serving the East Asian region, it now covers China as well. Today, it is common knowledge that during the 1980s, over 60 per cent of foreign capital flow into China were channeled through Hong Kong, and that Hong Kong's financial services were instrumental in organizing syndicated loans and in raising funds to help China's modernizing endeavours. Since the



1990s, Hong Kong's importance to China has grown substantially as witnessed by the recent listing of Chinese enterprises on the Stock Exchange of Hong Kong, thus enabling them to have access to Hong Kong's international capital market.

Therefore it is clear that structural changes in Hong Kong has had a dual effect. On the one hand, it transformed Hong Kong from a manufacturing oriented to a service oriented economy while at the same time further strengthened its position as the financial centre of the region. On the other hand, it helped SEZs develop quickly into manufacturing centres and provided job opportunities for people not only in Guangdong but also other parts of China. Last year, it was estimated that Hong Kong manufacturers alone operated over 30,000 factories and employed over 3 million workers in Guangdong Province. Such employment opportunities not only improved the standard of living of the SEZs but also of the neighbouring regions. Through the rapid development of Guangdong and the coastal region into a manufacturing stronghold, management know-how and technology have been effectively transferred from abroad, and workers' productivity has been enhanced. Today, Guangdong is the world's fastest growing economy, and its exports, albeit routed through Hong Kong, have contributed, among other things, to China's huge foreign exchange reserve and to the trade friction between China and the United States.

## **HONG KONG'S INCREASING ROLE**

More recently, investments from or channeled through Hong Kong have been branching out from manufacturing to housing, infrastructure and retail trade. This has led to an ever-increasing role of Hong Kong in China's economic reform. It may be recalled that during the 1980s, the most important role played by Hong Kong in China's and particularly Guangdong's economic development was the setting up of manufacturing operations in SEZs, which involved the in-flow of Hong Kong capital as well as the much needed management know-how to improve productivity. At a later stage,, Hong Kong's role as a financial centre facilitated the induction of foreign capital and thus transfer of technology into China. At present, Hong Kong's role has emphasized on the provision of financial and related services. Thus, Hong Kong now performs a multiple role: while Hong Kong manufacturers continue to set up operations in China, Hong Kong investment in China has diversified into areas other than manufacturing, including the building of power plants and highways, telecommunications, real estate development, retail trade, etc. This role is likely to continue in future, and it is expected that the contribution of

Hong Kong's service sectors will be of equal importance to China, if not more than that being made by the manufacturing sector.

This multiple and increasing role of Hong Kong's has the effect of not only quickening the pace of China's transition from centrally planned to market oriented economy but making the process more irrevocable. This is because foreign or rather the Hong Kong way of doing things brings with them different business practices and corporate cultures, leading to the fostering of a set of new values more akin to free market economy. Call it capitalism's positive influence or bourgeois decadence, many parts of China are more and more like Hong Kong and the outside world. Today, many Hong Kong businessmen have already ceased to consider commuting to and from Shenzhen as crossing a boundary separating two different political entities. Hong Kong and the SEZs in Guangdong as well as cities in coastal and other provinces are fast becoming a borderless economy.

As mentioned earlier, another service Hong Kong has recently started to offer China is to help the listing of Chinese enterprises on the Hong Kong stock exchange. Because of the need to meet stringent requirements of the Hong Kong Stock Exchange, it has made it an urgent task for concerned Chinese enterprises to reorganize themselves in order to improve their productivity and profitability. This in turn has an important impact on other state run enterprises in China, the survival of many of which depends upon heavy state subsidies. Hopefully, these state enterprises would find it necessary to undergo similar reorganization and eventually become commercially viable operations. This would help reduce the central government's budgetary deficits, considerably lessen its financial burden, improve the allocation of scarce resources to more productive use and eventually accelerate economic reform.

## **CHINA'S INVESTMENT IN HONG KONG**

The listing of Chinese enterprises on the Stock Exchange of Hong Kong signifies a new development in the flow of capital between China and Hong Kong. In addition to direct investment, the Hong Kong public can now invest in Chinese companies whose stocks are listed on the local exchange. On the other hand, China has a long history of investing and conducting business in Hong Kong, whereas Chinese capital has been acquiring interests in Hong Kong's listed companies. Hence it may be worthwhile to touch upon briefly China's investment in Hong Kong.

According to a latest estimate, China's investment in Hong Kong amounts to about US\$12 billion, whereas China Daily, Beijing's official English

language newspaper, has put the figure at US\$20 billion. Either figure makes China the largest foreign investor in Hong Kong. These investments may roughly be grouped under three categories. They are: investments in the financial or banking sector, investments in property and land, and share holdings in companies listed on the Stock Exchange of Hong Kong.

The most visible investment in the financial sector by China is the Bank of China group, which is the second largest financial institution in Hong Kong. The group has been continuously expanding its business in recent years. As at the end of 1992, it held over 22% of total deposits in Hong Kong. It also had a considerable share of the corporate finance and real estate market. At the end of 1992, the group's Hong Kong dollar loans and advances amounted to HK\$151 billion or 18.6% of the total bank loans. However, it is difficult to ascertain the total amount of investment by China in this sector.

It was in the early 1980s that China-funded enterprises started to invest heavily in local property. Total Chinese investment in this sector at the end of 1992 was estimated at HK\$8,187 million. In addition, China also took part in government land auctions. Between 1988 and 1992, China's total investment in crown land amounted to \$4,518.5 million, some of them in joint venture with Hong Kong property developers. These two items add up to more than HK\$12 billion, or over US\$1.5 billion.

The companies listed on the Stock Exchange of Hong Kong in which China has a stake offer a useful yardstick to gauge China's investment in Hong Kong. As of 31 March 1993, the total market value of shares held by China-owned companies amounted to over \$56 billion or more than US\$7 billion. It should be noted that numerous acquisitions and reorganizations have taken place since then so that by the end of the current fiscal year, there is likely to be a substantial increase in the total amount. Table 21-3 shows the market value of shares in Hong Kong listed companies held by various Chinese entities, comprising Hong Kong registered companies as well as government agencies and state-owned companies in China.

With China investing heavily in Hong Kong and Hong Kong's increasing investment in China, the two economies are now mutually interdependent, especially those of Guangdong and Hong Kong which have become closely integrated. It is said that in the coming years, Hong Kong can serve China in terms of economic development in a similar way as Manhattan used to serve the rest of the United States. There is also the view that Hong Kong and Guangdong is already the core of a South China Economic Region, which may eventually encompass Hainan and Fujian provinces. Scholars have also advocated the idea of a Greater China Economic Circle, embodying the coastal region of China, Hong Kong and Taiwan. In short, following the rapid

**Table 21-3 Summary of China's Investment in Hong Kong's Listed Companies**

1. CITIC	\$34,861,777,595
2. China Merchant Holdings Group	\$879,954,029
3. China Resources Group	\$1,629,943,238
4. China Travel Services Group	\$2,850,000,000
5. Shougang (Holdings) Co., Ltd.	\$1,498,118,553
6. China National Nonferrous Metal Industry Corporation	\$1,262,552,759
7. China Everbright Group	\$229,389,000
8. China State Construction Engineering	\$3,173,419,350
9. China Aerospace Industry Corporation	\$238,108,113
10. China National Cereals, Oils & Foodstuffs Import & Export Corp	\$4,455,119,192
11. China Venturetech	\$653,758,006
12. Petroleum Related Companies	\$697,642,493
13. Guangdong Enterprises (Holdings) Ltd.	\$3,729,143,156
14. Fujian Investment & Enterprise Corporation	\$846,814,915
TOTAL	\$57,005,740,399

N.B. The above figures include some acquisitions immediately after 31 March, 1991

economic development of China, with South China becoming the world's fastest growing economy, and in view of the economic integration of Hong Kong and South China as well as Taiwan's heavy investment in China in recent years, it is only natural to look upon this region as an economic entity, not merely because of geographical proximity, but rather because of economic mutual reliance and ethnic homogeneity.

### **SOME PROBLEMS**

However, while economic integration of Hong Kong and South China has proven to be mutually beneficial, it is not without underlying discords. This is because although economically interdependent, there are still many dissimilarities between China and Hong Kong, not to mention Taiwan. While Taiwan is not within the scope of this paper, the fact that China and Hong

Kong have divergent political systems and will remain so after 1997 as stipulated in the Basic Law under the "one country, two systems" principle can not be over emphasized. The main reason that Hong Kong has become what it is today is because it has always operated under the free market system with little interference from the Government. Thus far, the government's main role has been to provide the necessary infrastructure, a legal framework and a separate judiciary based on the British model, and these are the essential factors which make Hong Kong click.

Hong Kong businessmen's decisions to invest in China have been made not because of any government policy or directive but mainly on their own volition as part of their corporate strategy to remain competitive, seek profit and ensure growth. Although China offers many attractions to investors, there are also drawbacks and hence risks, but Hong Kong businessmen are willing cope with these drawbacks and to take these risks. Once the negative factors outweigh the merits, they have the obligation to take measures to protect their and their shareholders' interests. For example, when the most favoured nation issue cast a shadow of uncertainty over export prospects to the United States, many manufacturers looked for alternate venues of investment to prepare for adverse circumstances, and they are likely to take similar steps in the future when the same issue comes up again.

Also, political and economic stability in China is essential to keep Hong Kong investments in China and to attract new capital inflow. In general, there is a consensus that China's economy will continue to improve and grow in the long run, but short term ups and downs having adverse effects on overseas investment, including those from Hong Kong, can not be ruled out. For example, the instability of the Renminbi earlier this year was not only of grave concern to Chinese authorities, but also a cause of alarm to Hong Kong businessmen, many of whom sustained considerable losses. Thus far South China has not been seriously affected by political events in China, except that smuggling and corruption have cast a dark shadow on Chinese authorities abilities to cope with illegal activities which are detrimental to normal business operations.

As to the continued stability and prosperity of Hong Kong, it has been clearly stipulated that after reverting back to China, Hong Kong will become a Special Administrative Region with a high degree of autonomy. Yet should anything happen to cause the local and international communities to have doubts or even lose confidence in Hong Kong's future, the effect would be quite serious and need not be elaborated here. It is therefore of paramount importance for China to demonstrate to the world that the spirit of "one country, two systems" will prevail after 1997.

In fact, in view of the close integration of the economies of Hong Kong and China in general and Guangdong Province in particular, neither Hong Kong businessmen nor international investors are concerned about the economic side of the 1997 transition. Almost everyone believes that, since the two once different economic systems are becoming one following China's economic reform and decision to opt for a socialist market economy, Hong Kong and Guangdong, if not the whole of China, are going to have one economic system after 1997 or perhaps even before. In other words, even if there is no 1997 issue, the integration of Hong Kong's and South China's economies will be such that economic activities are most likely to be carried out as if under one economic entity. What is important is whether political factors will foster or hinder such economic activities.

Apart from worries that corruption in China might spread to Hong Kong after 1997, the main concern is whether or not the essential ingredients which make Hong Kong flourish will be preserved and whether or not Hong Kong's present bilateral and multi-lateral agreements with various business partners and government and/or international organizations will have continuity. In this regard, it is essential that the notion "two systems" is interpreted to mean "two separate political systems" and that all prevalent legislation, agreements and treaties that ensures Hong Kong's position as an international service centre are indeed "not to be changed in fifty years".

## **OUTLOOK**

Given the above proviso, it may be safely stated that the economies of Hong Kong and China will see further integration in the years to come to the mutual benefit of both. One area in which such further integration may lie in closer cooperation and coordination among the stock exchanges of Hong Kong, Shanghai and Shenzhen, plus any new stock exchanges yet to be established in China. There has already been a prediction that eventually investors in both Hong Kong and China would be able to trade equities on these three stock exchanges as if they were one, and that even a central clearing system linking up all three would be in place. Such predictions do seem premature at the moment, but the possibility cannot be ruled out in the long run. Much depends on the convertibility of the Renminbi, China's membership in GATT and, above all, the pace and degree of success of economic reform in China.

Another area in which there is much room for cooperation is R&D and the commercialization of the results thereof. As mentioned in the outset, Hong Kong is very weak in R&D, which poses a limit to its future development. As a service centre on the doorstep of China, Hong Kong is in a unique position to

complement China's R&D capabilities. In fact, Japan's rise a few decades ago to the status of an economic power was due to her ability to utilize the results of scientific and technological research attained by western countries to manufacture innovative consumer products. There are reasons to believe that Hong Kong and China, by working closely together, can follow Japan's footsteps in this regard. May be the Wild Geese Theory would once again prove its case here.

In conclusion, as long as China continues to make efforts to improve her political image in the international community and as long as her economy remains vibrant, foreign investors and businessmen will be keen to develop closer relationship with China. As China's business partner and service centre, Hong Kong can look forward to many years of stability and prosperity ahead.





## CHINA'S BANKING DEVELOPMENT

*Antony LEUNG*

As China enters the second year of the economic boom that began in 1992, its economy has shown signs of overheating: rising inflation, widening trade deficit, depreciating Renminbi, shrinking bank liquidity. The Chinese government has responded with a number of measures. We have seen encouraging early results. The government is also seizing this opportunity to introduce various reforms, including reforms of the banking system. This is clearly something we would like to see happening.

To a large extent, the overheating of the economy was the result of the over-expansion of bank credits mainly due to the central bank's inability to exercise monetary control. Banking reforms, therefore, lie at the heart of attempts to ensure a healthy growth of the Chinese economy.

### **EARLY REFORMS - CENTRAL VS COMMERCIAL BANKING**

Since the early 1980s, China's banking system has undergone several major changes. The reform began with the separation of China's monobank system, under which the People's Bank of China (PBOC) acted both as a central bank and as a commercial bank.

In 1984, the commercial banking activities of the PBOC were transferred to a newly established specialised bank, the Industrial and Commercial Bank of China. The PBOC was then made a central bank, formally in charge of monetary management, supervision and regulation of banks. The then existing specialised banks, namely the Agricultural Bank of China, the Bank of China, and the People's Construction Bank of China, were also restructured to undertake conventional commercial banking business.

These changes, which focused on the separation of the **central** and

**commercial** banking functions, however, have been less than fully successful. Most importantly, the **fiscal** and **monetary** roles of the banking system remain blurred in China.

As regards central banking, although the PBOC is no longer merely a cashier of the government as it was prior to 1984, its basic subservience to the state's fiscal needs remains. In 1992, more than half of China's fiscal deficit of Renminbi 46.6 billion was financed by advances from the central bank which amounts to printing of money. Such exploitation of the central bank's money creation power has led to rising inflationary pressure.

On commercial banking, the specialised banks remain more or less administrative organs of the state, responsible for providing loans to government priority sectors. At present, 30% of the loans extended by the specialised banks are loans made at the request of the government for policy considerations. As a significant portion of these loans are granted to poorly managed, loss-making state-owned enterprises, bank profitability was inevitably affected.

### **RECENT REFORMS - FISCAL VS MONETARY ROLES**

In recognition of these problems, additional attempts have recently been made to further reform the banking system. A Central Bank Law and a Commercial Bank Law are being drafted. Under the proposed central bank reform, it is reported that the People's Bank of China will be given more power to exogenously determine, free from political interference and pressure, the country's monetary base.

In the area of commercial bank reform, specialised banks will be given greater autonomy over the lending decisions. Three state-owned banks, namely the Long-Term Development Trust Bank, the Import and Export Credit Bank, and the Agricultural Policy-Oriented Bank, will be established to take up the policy loans from the existing specialised banks, and the latter will be left to run as true commercial banks. More provincial commercial banks will also be set up.

To separate the fiscal and monetary roles of both the central bank and the specialised banks, these changes are steps in the right direction. Other details of the reforms in the Banking Laws have yet to be finalised. It is, however, in my view that they should at least include the following changes.

## **CENTRAL BANK AND MONETARY MANAGEMENT**

### **Strengthen Central Bank Independence**

The government should be prohibited by law from borrowing from the PBOC. Any fiscal shortfall should be covered by issuing more government securities to the public, and not by printing money. This is critical if we wish to avoid inflation in China.

The Central Bank Law should clearly state that one of PBOC's primary policy objectives is to maintain price stability in China. To ensure the effectiveness of monetary policy, the People's Bank of China should also be made adequately independent of the administration. The governing Board of the PBOC should be appointed by the Premier and should be empowered to stay clear of influences by other administrative branches of the government. This governing Board will set monetary targets after consultation with the State Council. The target will be announced, and growth of money supply will be managed and monitored against this target.

To avoid local political interference, the PBOC branches should be made independent of the local governments. They should report directly to the PBOC headquarters in Beijing which, in turn, reports to the governing Board.

### **Restrict Proliferation of Non-Bank Financial Subsidiaries**

At present, banks in China are allocated quotas on the amount of credit they can make at interest rates administratively set by the PBOC. In principle, therefore, bank lending is controlled by the central bank through a quota system. In practice, however, many banks have set up non-bank financial subsidiaries, for example, trust and investment companies, to get around the quota system.

In essence, banks have lent large sums of fund via the unregulated interbank market to those subsidiaries, which in turn lend the money to the banks' customers or other ventures owned by the banks themselves, including real estate projects. To avoid the over-expansion of bank credits, measures should be taken to control the mushrooming of those non-bank financial subsidiaries, and to restrict lending to these vehicles.

### **Deregulate Interest Rates**

In the longer run, the present direct administrative means of setting quantitative restrictions on credit expansion should be abolished. The amount of credit extended by banks should be determined by the market, under flexible

interest rates that respond better to inflation, as well as the demand for and supply of funds.

### **Develop Indirect Monetary Policy Tools**

Monetary policy tools should also be developed to guide market interest rates, and to control credit creation by banks. Priority should be given to replace credit ceilings with other monetary policy tools, such as adjustments in reserve requirements, rediscount rates, and if necessary, open market operations.

However, the use of rediscount rate at present is hampered by the lack of a well-developed market in securities suitable for rediscounting. The non-existence of an appropriate government instrument with a deep, active and resilient market also limits the use of open market operations to control bank credit in China. Thus, the development of effective monetary policy tools requires the issuing of more government securities to banks, and the development of an active interbank market. With a developed government securities market, the PBOC would then be able to add or withdraw reserves from the banking system to encourage and restrict credit growth.

## **COMMERCIAL BANK AND REGULATORY FRAMEWORK**

### **Make Banks Accountable for Own Profit and Loss**

It should, however, be noted that the use of monetary policy tools to control credit creation by banks works its way mainly through changing the cost of funds for banks. For example, higher rediscount rate raises the cost for borrowing reserves from the PBOC, which will tend to restrict credit creation by banks.

However, as banks in China are still not yet fully responsible for their own profit and loss, any increase in their cost of funds is not likely to provide sufficient disincentive to limit their lending. Banks in China should therefore be transformed into profit-motivated, self-supporting commercial entities, if monetary policy is to be effective.

### **Privatise the Commercial Banks**

In the long run, commercial banks should be privatised. This can be achieved through listing shares of the banks in the stock market. However, several major hurdles need to be cleared before this can happen: separation of policy loans from specialised banks, publishing of financial statements and

information for the use by investors and depositors, and establishment of effective bank supervision. Some of which I shall address later.

### **Strengthen Bank Supervision**

The PBOC is responsible for supervising the banks. But as the specialised banks are essentially financing vehicles of the government, bank supervision tends to ensure that the quotas and policy considerations of lending set by the State are met. The objective is therefore very much compliance.

As banks evolve to become accountable for their own profit and loss and are freed from extending policy loans, the focus of supervisory efforts should be shifted from **compliance** to an **assessment of bank risks**. Bank supervision should therefore be designed to ensure the safety and soundness of single banking institutions, and the stability of the banking system as a whole.

In examining individual banks, some central banks in the West would focus their attention in five aspects of bank risks. For easy reference, it is commonly known as the CAMEL approach, where C stands for capital, A assets, M management, E earnings, and L liability.

### **Maintain Adequate Capital**

Capital is important because it is needed to absorb losses. Banks are in the business of taking risks and there will be losses. The specialised banks, after shifting their policy loans to the to be set-up policy banks, should have enough capital to work as commercial banks. In the long run, by privatising the commercial banks, banks should tap the stock market to enlarge their capital base.

### **Develop Clear and Profitable Asset Portfolios**

Commercial banks should no longer be told what industries they should be lending to. To avoid undue risks, regulators and bank management have to develop guidelines to ensure that commercial banks maintain a healthy and yet profitable portfolio. These measures should include: avoidance of concentration of lending to single industries and firms, restrictions on lending to related parties, restrictions on lending relating to share financing, real estate, restrictions on banks' own activities in real estate holding, speculation on stocks and other financial markets, etc.

I shall leave management, to the last.

### **Ensure Healthy Earnings**

Earning is important to commercial banks because this is the primary source of capital. By looking at profitability ratios and trends, we can have a feel on whether a particular bank is well run.

### **Develop Capability in Liability Management, or Treasury Management**

Liability management in the broad sense is treasury management which includes management of interest rate risks related to the asset and liability mismatch; foreign exchange exposure; liquidity risks of the on and off balance sheet items, etc. This is a very important aspect and banks must develop capabilities in it. Many bank managers focus on the asset portfolio and forget the liability side. Treasury management is also highly sophisticated. However, if properly managed, this is also a very profitable activity.

### **Develop Control and MIS Capabilities**

Before I turn to the management, let me also touch upon the importance of maintaining control. Here I refer to two areas, the macro side and the micro side. Macro in the sense that banks should have adequate internal management information system that enables the managers to manage the various aspects of banking. Micro refers to the systems and mechanisms that prevent frauds and embezzlement. Banks handle massive sums of money and credit. The risks of frauds, both by insiders and outsiders, are high. Effective and comprehensive processes and systems must be in place to avoid financial losses. If not properly handled, it can threaten even the entire financial system.

### **Develop Capable Commercial Bank Managers**

The letter M is right in the center of the word CAMEL, and indeed management is the most important aspect in determining the success of a bank. It is however, the most difficult for bank examiners to assess, and for the banks to develop. China, with the proposed changes in the banking sector, and the establishment of new banks, needs a lot of bankers, in all departments, and from senior to junior. A lot of training, both classroom and on-the-job, is needed. The task is daunting.

## **FOREIGN BANKS CAN CONTRIBUTE TO THE TRANSFER OF TECHNOLOGY**

If foreign banks are allowed to participate in more activities in China, they will bring in experienced, well-trained managers. Also they will be training the people that are hired locally too. There will always be managers leaving to join the local competitors. This represents an effective way to transfer technology.

In Asia, many senior managers in the financial industry are former Citibankers. In many Asian cities, we have periodic gatherings for Citibank alumni. Sometimes several hundreds of former Citibankers will show up. They include central bank governors, finance ministers, bank presidents, and other senior officers in the banking industry. This is just an illustration of what foreign banks can do.

## **HONG KONG CAN HELP**

Hong Kong, being an international financial center, should be able to help too. China can, and have to a limited extent, utilise Hong Kong's pool of trained manpower in the financial sector. These are people that have effectively learned skills of financial services from the West and applied it to a predominantly Chinese society. They also speak Chinese. One of the most effective ways is to work on banking deals in China. Through live examples, the customers and banking colleagues that work on the same deals will learn. This will again require foreign banks to be allowed more franchises in China, such as banking in local currency.

Other ways can include lecturing in seminars, and there have been quite a bit in the past. China can also consider setting up Advisory Committees on various aspects of banking and finance at both the city, provincial and central government levels, and invite Hong Kong people to serve as members. After the commercial banks are privatised, may be they can invite Hong Kong people to serve on their boards.

China's economic reform is well underway and is progressing fast. But it is my feeling that banking reform is lagging behind. It is time to catch up. The task is daunting, but it must be done. In the process, they should properly utilise the expertise that exists in foreign banks, and in Hong Kong. And I am sure foreign banks and Hong Kong people will be more than willing to help.





## **TRADE AND TOURISM LINKS BETWEEN CHINA AND HONG KONG - Building Synergy for Competitive Advantage**

*Martin BARROW*

### **INTRODUCTION**

As the 1990s usher in an increasingly open and interlinked world economy, we need only turn to the outstanding symbiosis of business between Hong Kong and China -- particularly the strength of the Pearl River Delta partnership -- to see how a terrain of economic interdependence fuels growth.

The business communities of Hong Kong and China afford each other a competitive edge, and through creative inter-reliance have produced in southern China one of the industrial powerhouses of Asia. Our outstanding trade record is powerful evidence of what can be achieved through a mutually-beneficial alliance. Total trade between us now exceeds 80 billion US dollars a year, and continues to grow at an annual rate of more than 20 per cent. Hong Kong's re-exports to China have increased by a staggering 1,000 times from US\$27M in 1978 to over US\$27B this year.

Hong Kong's cross-border manufacturing in Guangdong province has transformed the Pearl River Delta into what Mr. Deng Xiaoping has insightfully called the fifth economic dragon. There are 30,000 enterprises and some three million workers in Guangdong producing for Hong Kong companies. Hong Kong accounts for almost 70 per cent of China's foreign investment, and China is a leading investor in Hong Kong.

## **PARALLEL LINKS**

This pattern of prosperous synergy in manufacturing, trade and investment is equally integral to the growth and diversification of our tourism sectors. Already the links are strong.

Some 1.3 million visitors from the mainland travelled to Hong Kong in the first nine months of this year, making China the second-largest source of visitors for the territory after Taiwan. In the other direction, Hong Kong is pivotal to China's tourism related foreign exchange earnings as Hong Kong people, along with a small number from Macau, accounted for 85% of China's overseas tourist arrivals in the first half of this year.

In addition, 28% of Hong Kong's international visitors now travel on to China, which is double the numbers of just five years ago. Clearly, as Hong Kong increasingly asserts itself as a springboard into China, we will see parallel patterns of trade and tourism growth. The business sector will account for an even greater percentage of travel to China through Hong Kong in the future, and we are likely to see more integrated tourism services between Hong Kong and southern China as a direct result of economic integration in the Pearl River Delta.

Industry officials in Guangdong report that the province's tourism industry attracted some 6.8 million foreign visitors last year -- that's about 20 per cent of China's total -- earning over \$1 billion US dollars in foreign exchange. The fact that 20 to 30 per cent of Hong Kong's visitors come on business contributes significantly to Guangdong's tourist revenues and, in turn, business travellers on their way to booming Guangdong stimulate the territory's revenues, such as hotel earnings. Guangdong officials want to see the Pearl River Delta become one of the most attractive travel destinations in East Asia and tourism is certainly set to play a bigger part in the province's economic growth.

On an industry cooperation level, the Hong Kong Tourist Association is discussing with its counterparts in Guangdong and Macau to foster the promotion of the Pearl River Delta, and to jointly take part in some international promotion in 1994. Guangdong is keen to use Hong Kong's sophisticated tourism development infrastructure to boost tourist numbers and is regularly participating in tourist trade fairs in Hong Kong.

## **TAPPING INTER-ASIA GROWTH**

Another important factor in maturing Hong Kong-China tourism links is the improvement in relations between Southeast Asian countries and China, which has opened up the mainland as a travel destination for Chinese citizens from

other countries. As a result, more of Hong Kong's Asian visitors now travel on to China.

Industry pundits point to the possibility that no less than 45 million trips are expected to be taken by Asians by the year 2000, of which 30 million are expected to be made by non-Japanese. As a result, catering to the Southeast Asian and Asian markets should be a priority for both Hong Kong and China. There is certainly room for further cooperation between us to capture this potential.

The Hong Kong Tourist Association is focusing on consultation and exchanging information with China, in order to tap mutually-beneficial growth opportunities.

There is a lot at stake in the territory, which is recognised as Asia's most popular travel destination, tourism is now our second-largest foreign-exchange earner, second only to textiles and garments. In China, 20 million visitors spent 2.1 billion US dollars in the first half of this year alone. China hopes to achieve a national income from foreign tourism of five billion US dollars by 1995 and 10 billion by the year 2000.

## **SERVICE GROWTH OPPORTUNITIES**

We will also see the scope of both our tourism and business links driven along by a welcome move in China to open its service sectors to foreign investment. We are witnessing unprecedented access to China retail sector, with companies from Hong Kong, Japan and Southeast Asia making investments. In addition, Hong Kong and multinational consumer goods marketers are expanding business as China's privately-owned retail sector grows, and consumer demand rises.

A McKinsey report has predicted that by the year 2000, the number of affluent consumers could rise more than three-fold to 200 million, at which time China is forecasted to have a consumer durable market, in terms of purchasing power and population, larger than most of the East Asian markets today.

Stronger and more sophisticated consumer demand among China's consumers has been particularly visible in Hong Kong recently, where Hong Kong people have been somewhat surprised to see mainland visitors willing to spend sums in our up market stores.

As retail reform matures in China, there should be additional scope for partnerships in marketing tours and travel products. Hong Kong companies already play a major role in helping China to upgrade and expand its tourist facilities. In the first half of this year, Chinese authorities approved 68 hotel

projects worth 1.35 billion US dollars, the lion's share of which were financed by Hong Kong.

Certainly in southern China -- where there is greater exposure to international business practices and a strong desire for self reliance -- there is recognition of an urgent need for improving and expanding tourist facilities and infrastructure. Guangdong pioneered the use of foreign funds to develop tourist facilities back in 1979 when the Dong Fang Hotel was renovated with foreign funds; it has garnered two billion US dollars in the past 18 months to further stimulate facility development.

China has announced 11 national tourism zones offering incentives to foreign companies to build and manage tourist resorts, which should further inject world-class standards into China's infrastructure.

Hong Kong's private sector has a role to play in stimulating improvements in transport and service standards, both between Hong Kong and China and within the Mainland. Hong Kong's Wyfold Property Development, for example, is building a management school to train its staff in international-standard service as part of a two billion US dollar "tourist city" in Haikou, Hainan Island.

## **COOPERATION TO ADD VALUE**

Hong Kong has long been considered the key to opening doors to trade in China, and from the point of view of many overseas tourists, tourism agencies and operators, it is certainly a strategic port and service provider for China travel, whether for business or leisure.

While the Hong Kong Tourist Association's resources remain focused on promoting Hong Kong, it certainly recognises the added value of helping China to develop its capabilities in serving tourist. In cooperation with the China National Tourist Association, we have been promoting staff exchanges, executive training programmes, and high-level dialogue.

In line with great opportunities for expansion of our tourism sectors, the Association's strategy towards China comprises a widening range of assistance and cooperative ventures:

- We promote selected day excursions in our product manual for overseas tour operators to give them up-to-date information when planning their Hong Kong-bound tour packages.
- Hong Kong's gateway role for China-bound travel is promoted at international trade shows and overseas markets to highlight Hong Kong as a stopover destination.

- Information materials on selected Chinese excursion destinations are available at our information centres, and through our hotline service lines and overseas offices.
- We are initiating cooperation with the special economic zone of Shenzhen to our north and neighbouring China tourist destinations at international trade shows.
- We continue to foster annual high-level exchanges with the China National Tourist Association and the Civil Aviation Department to plan for mutual benefit.
- We have created an ad-hoc China Travel Committee whose work is focused on resolving technical issues and identifying new China travel opportunities with potential value for Hong Kong.
- The Hong Kong Tourist Association also promotes key Chinese cities as pre- and post-conference destinations when bidding for international meetings, conventions and incentive travel groups.

We are well aware of the revenue-pulling China factor in the midst of unprecedented inter-Asia travel growth, and in the tourism sector, at both public-sector and private-sector levels, aim at achieving the kind of synergy of the proven partnership between Hong Kong and China in manufacturing and trade. We would do well to focus further on dual industry development issues such as simpler immigration procedures at Hong Kong's border points with China, and possible visa exemption for short stays in the go-ahead special economic zone of Shenzhen.

There is also scope for Hong Kong's growing role as China's equity market to boost much-needed funds for improving China's tourism infrastructure and facilities. The power of our partnership in the longer term may well hinge on how successful we are at broadening the teamwork we have successfully developed in such areas as manufacturing and trade to encompass our burgeoning service sectors.

## **FUTURE CHALLENGES**

The Hong Kong-China business partnership is certainly an outstanding achievement increasingly seen by some of the world's economic powers as a model for meeting the competitive challenges of a more interlinked world economy. It is certainly a relationship we want to safeguard and propel. Planning is essential] to those goals, and to ensuring Hong Kong concentrates

its resources and energies on an economic agenda as the best way forward for its people.

There are several key issues that deserve attention if we are to build on a wealth-creating synergy necessary to tap growth in China, which is forecast to make it the world's largest economy by 2010:

- More understanding is needed on the issue of China's Most Favoured Nation Status in order to safeguard investment interests by Hong Kong and foreign companies in China as well as the territory's role as the mainland's gateway. It is, in fact, ironic that a territory that has created access to China for the world, stood to lose up to 4.5 billion US dollars in business if MFN had not been renewed this year. The US has a significant stake in the economic wellbeing of both Hong Kong and China, and we should be all working together harder to protect it.
- Another problem that could impinge on our future prosperity is the recent fluctuation of the renminbi. Hard hit by falling rates earlier in the year were joint-venture investors with US dollar loans and RMB earnings, along with stockmarket investors. Some companies hedged their options by limiting imports and pumping profits back into the local economy, but most investors are using whatever influence they have to urge Beijing to introduce measures that will result in a more stable currency. Certainly Hong Kong's business community has a lead role to play in this endeavour.
- We could also be working harder to encourage progressive public sector reforms in China and the further development of a growing private-sector culture there.

Hong Kong's recent activities in helping China to mobilise foreign investment capital through Hong Kong's stock market has helped promote China's state enterprise reform, and this gradual strengthening of Hong Kong's role as one of China's major financial centres deserves ongoing attention to ensure growth on a fair and orderly basis.

Finally, the challenge to maintain Hong Kong's renown as the key to opening doors to business in China is one we cannot afford to let slip. Hong Kong welcomes investors and business from around the world, and provides a base from which thousands of foreign companies access business opportunities in China. Many multinational companies use Hong Kong intermediaries, who are familiar with the way mainland entrepreneurs and enterprises negotiate and operate, to develop China-based business prospects. For the future, I am optimistic that we have the ability to help close any perceived Sino-West business culture gaps that might hinder growth.

The Hong Kong Trade Development Council, for example, is committed to running marketing seminars, and has stepped up its China promotions this year to 62. It has trade promotion offices in Shanghai, Guangzhou and Shenzhen and plans to open 10 more offices across China in the next three years.

Hong Kong and China's proven partnership should also extend to tackling potential growth hindrances between us, such as customs clearance and transportation, production efficiency and labour supply, in addition to resolving strains in Sino-US trade relations.

Economic links with the mainland will increasingly underpin Hong Kong's economy, and it is in both our interests to look ahead for ways to consolidate our prosperity in the context of one country, two systems. In a complex world, strategic alliances are proven tools of competitive advantage, and I am confident Hong Kong and China share a vision of value-added partnership.





## **SOME OBSERVATIONS OF THE LEGAL SYSTEM, STANDARDS AND PRACTICES IN A SOCIALIST MARKET ECONOMY**

*University Graduates Association of Hong Kong*

*contributed by*

*Rico CHAN*

*Cheung CHING*

*Chai-kwong MAK*

*Sophia YAN*

*Yat-cheung CHAU*

*Chak-man LI*

*Kai-man WONG*

*"Everyone is anxious to know the kind of society we ourselves, and our children and grandchildren, will live in."*

*--- Mikhail Gorbachev*

### **INTRODUCTION**

As part of the Hong Kong University's 80th anniversary celebrations, the University Graduates Association of Hong Kong (UGA) initiated a study project "Chinese Cities 2001". The objective of the project is to have a better understanding of recent developments in Mainland China, especially for regions with big cities as nuclei. The ultimate goal is to gain insights into China's development prospects after implementation of the open door policy and the introduction of market mechanism into the economy.

This paper draws on the study team's preliminary observations during their field visits to China<sup>1</sup> and is an attempt to explore those issues which the study team believes would constitute the key ingredients in China's economic reform. Starting with a note on the politico-economic systems, this paper first

considers a possible analytical framework for interpreting China's contemporary economic scene. It then focuses on changes in the institutional set ups and such issues as enterprise reforms, developments in the legal system, standards and practices in daily life. After re-visiting the theoretical note, some initial views which relate the impact of these changes to Hong Kong are drawn as conclusions to this paper.

## **AN ANALYTICAL FRAMEWORK**

### **A Note on Political-Economic Systems**

The question that we are about to address seems to be one of state intervention. However, as Johnson<sup>2</sup> has pointed out, all states, for various reasons, intervene in their economies. Thus, the question at issue is not whether the state intervenes in its economy but how it does so and for what purposes. Such a question is basic to the present discussion. An examination of the relationship between government institutes and market activities will place the question into perspective.

Table 24-1 summarizes some of the terminology used by Lindblom and Johnson<sup>3</sup> in the classification of the different types of political-economic systems.

**Table 24-1 Different Types of Political-Economic System**

		<b>Political System</b>	
		<b>Polyarchic</b>	<b>Authoritarian</b>
<b>Economic System</b>	<b>Centralized Planning</b>	Plan Rational	Plan Ideological
	<b>Market Oriented</b>	Market Rational	Market Authoritarian

Accordingly, all non-socialist economies of the European states and North America with a highly market-oriented economic system and a democratic form of government are "market rational". All communist and centrally planned economies with centralized political authority belong to the category of "plan ideological". These two groups represent the polar extremes in terms of political and economic ideology. The other two groups represent the middle road. Hence, all the Asian noncommunist countries and most of the Latin

American new economies which operate with a market system and an authoritarian government could be grouped under "market authoritarian". Japan is an exception, in that its economic performance is the result of a combination of "soft authoritarian," strong state administration and a set of developmental priorities. Johnson terms it "plan rational".

## **Elements for the Analytical Framework**

### ***Basic Notion***

The basic notion followed from our observation is that after the introduction of market mechanism into China's economy, the key ingredients of China's economic system are now experiencing far reaching changes. These elements in fact are the building blocks for the continued development of new sets of economic relations. Collectively, they reflect the prospects of China building a new economic relationship which the Chinese government refers it to as a socialist market economy system.

### ***Notion of Economic Vs Political Intervention***

While it has been argued that the concept of a socialist market economy will not work -- a capitalist enclave in a communist country could not possibly survive -- we believe that there is a subtle difference between economic and political intervention. The implementation of economic reforms will impact on the political structure that ultimately, the political system will have to be adjusted.

### ***Notion of Institutional Changes***

A large volume of theoretical works had been done on the elements of economic reforms. For instance, Myers, in his studies of the economic organization and economic modernization during China's economic reforms drew on the extensive researches by Nobel Prize Winner Douglass North. Myers referred to North's observation that "a link possibly existed between institutional change, transaction costs, organizational forms and economic development" and argued that institutional change, whether initiated by the state or taking place in society, influences the structure of incentives for individuals and their organizations to cope with transaction costs and/or production costs more effectively.<sup>4</sup> Institutions, as defined by North is "*a set of rules, compliance procedures, and moral and ethical behaviour norms designed to constrain the behaviour of individuals in the intent of maximizing the wealth or utility of principals*".

### ***A Framework***

The above brief discussion suggests a possible framework to interpret China's contemporary economic reforms. The classification of political-economic systems and an examination of the institutional changes will help us to observe the likely direction an existing system will move when subject to particular sets of political and economic forces, both within and outside the system. Institutional changes is the focus of our present study.

## **THE KEY INGREDIENTS**

During our visits to China, we were able to see and experience many newly emerging things. Apart from themselves being live illustrations of the contemporary economic reform, they represent a huge array of issues and also reflect the immensely complex, sometimes difficult tasks that China now has to face in her economic modernization process. For the purpose of this paper, we shall group our observations under three main headings: (A) Enterprise reforms, (B) Developments in the legal systems, and (C) Standards and practices as reflected in daily life.

### **A. Enterprises Reforms**

About 40% of China's GNP is said to be produced by private or collective enterprises which are not under control of the Central Government. Enterprise reforms must be central to changes in the economic system. Their importance is also seen by the fact that "enterprise policy formulation" is now one of the main duties of the State Planning Commission.

The study team visited a number of enterprises in the major cities in China, including the Lufthansa Shopping Centre in Beijing, Guangzhou Peugeot Automobile Company, Shajiao Power Station in Dongguan etc. Two of our visits had left with us very deep impressions.

First, while in Wuhan, we visited the city's first publicly listed company -- Wuhan Department Store. Under a very enterprising leadership, the Department store was listed on the stock market in 1986. Although there was a controversy over "Capitalism vs Socialism" in 1988 and 1989, the leadership of the Store insisted on adopting the shareholding system while actively promoting business management practices. In just a few years, the volume of sale was increased from a few dozen million to four hundred million remimbi.

The second is not so much related to a single big organization, rather it is the numerous "getehu" (or individual) business seen in almost all cities. Particularly in Beijing, we saw the practice of "one street, two shifts" on Wangfujing Dajie, the main shopping street. Everyday, when most of the stores closed at around five p.m., many temporary "getehu" stalls started their business on the pavement. The goods were of a great variety ranging from clothes, books, snacks to household wares. They are licensed by the government and operate in standardized structures usually until nine or ten at night.

From these observations, we saw enterprise reforms are progressing at least in the following fronts -

- 1) Diversification of ownership - there is a definite shift from state owned enterprise to collective and privately/individually-owned business. For larger enterprises and foreign-owned, various form of rights of shareholder or equity holders exist.
- 2) Freedom for individuals in business decision - the importance of entrepreneurship is seen everywhere -- in running a business, instead of central allocation, it is now the art of purchasing commodities at low costs in places of abundance and selling them at higher prices at places where they are rarely found that counts.
- 3) Change in management and accountability -- accompanying the setting up of the different kinds of enterprises, the role of the general manager become increasingly important. For big business, they have to be accountable to the broad of directors; while for the individuals, although they are to be accountable to themselves, it is clear that they have to manage their business according to market principles and work their sums right.

Obviously, the reforms are not without problems. At the same time as new form of organizations are set up, conflicts and tensions arise due to differing legal and tax framework, and between foreign and domestic companies as a result of salary differentials (foreign JV's can pay more to attract talent) and many other practices and procedures. In order to reconcile the difference between two sets of game rules, it is clear that reforms and developments of China's legal system is urgently required.

## **B. Changes in the Legal System**

Market economy works on a set of well defined rules and it can only operate efficiently when the set of rules is clear, open and consistent. Without this, it is impossible to handle the enormous volumes of transactions which take place everyday while at the same time ensuring that the two parties of the transaction get what they paid for. Our discussion on changes in the legal system will cover three main areas, viz. developments in (1) Company law, (2) Protection of property rights, and (3) Freedom of contract and protection of contract rights.

### *a. Company Law*

Enterprises and companies are the key agencies of operation in market economy. But current laws and regulations in China do not adequately deal with issues like relationship between management and owners, directors' duties, corporate authority, limited liability, partnership etc. Following enterprise reforms, control of investment and formation of companies were relaxed to some extent. However, in many cases, formation of enterprises still relies on administrative approvals and are inefficient and susceptible to corruptions.

In the recent years, a number of initiatives to enlarge or strengthen the breadth of company laws could be seen, for example

- The General Principle of Civil Law (1986) and the Regulations on Registration of Enterprise Legal Persons (1988) have provided a rudimentary framework for legal persons (companies). The law is better developed for foreign investment enterprises. Guangdong Province and Shenzhen Special Economic Zone have enacted local company regulations, but there is not yet any nation-wide company law.
- The State Commission for Re-structuring the Economy has issued a set of "Regulatory Opinions" for limited liability companies and joint stock companies (i.e. companies limited by shares).
- The Bankruptcy Law (Trial Implementation) (1986) and local bankruptcy regulations in Shanghai and Shenzhen, etc. have provided for a basic legal framework for bankruptcy of companies.
- Basic regulations have been enacted for establishment and operations of private enterprises, collective enterprises and state-owned industrial enterprises. The Regulations on Transformation

of the Operation Mechanism of State-owned Enterprises (1992) have been enacted to improve efficiency of state-owned enterprises.

Under these new initiatives, a typical example is in Shenzhen where a new system now being experimented : the formation of companies by registration rather than by approval. The process is still in the embryonic stage and formation of companies in many sectors still require specific licences from the government for operation.

***b. Protection of Property Rights***

Whilst a very substantial portion of China's economic output is now originated from the non-state-owned sectors, state-owned enterprises still hold very substantial assets. Associated with enterprise reforms, private ownership of property is rapidly developing in China and a set of law to protect property ownership is therefore needed.

The PRC Constitution has recognized the legality of private enterprises and private ownership of property. Private ownership of property is on the whole adequately protected by law. For instance, ownership of property by individuals, enterprises and other entities are recognised by the General Principles of Civil Law (1986). The Inheritance Law (1985) provides for inheritance of private property of individuals. Regulations have been enacted for acquisition, disposal and protection of land use rights, buildings, patents, trademark, copyright, computer software, etc. China has also acceded to a number of international conventions on intellectual property rights. The General Principles of Civil Law and the Civil Procedure Law has provided for various judicial remedies for infringement of property rights, e.g. return of property, monetary compensation, mandatory order for cessation of harm, etc. The Criminal Law (1979) and the Regulations on Public Order Administration Punishments (1986) provide for various criminal and administrative sanctions against serious infringement of property rights, e.g. theft.

However, despite all the efforts in producing laws to protect property rights, it is a recognized phenomenon when local entrepreneurs, still worry of possible changes in policy and of envy from fellow citizens, are prompted to shift wealth abroad, if possible.

As for state-owned assets, regulations have been enacted for the establishment of State-owned Assets Management Bureau and for the management and disposal of these assets. However, constrained by

various unresolved policy issues, such as scope of privatization, not much improvement can be made to the existing laws covering this area. In this regard, state-owned Assets Bureau, not being well regulated, could still be a source of major corruption.

**c. *Freedom of Contract and Protection of Contractual Rights***

The set of laws governing the efficient exchange of commodities and adequate protection of exchange rights must be in the forefront of a market economy. With considerable earlier works done, there are no major obstacles in the further development of China's contract law system. The Economic Contract Law (1982), the Foreign Economic Contract Law (1985) and the General Principles of Civil Law (1986) have provided for a basic legal framework for formation and enforcement of contracts. China has also acceded to the UN Convention for International Sales of Goods.

The recent amendments to the Economic Contract Law (1982) are good illustrations of legal changes accompanying development of market economy:

The relevant laws provide for (1) monetary compensation; (2) liquidated damages; (3) specific performance; (4) return of property; (5) declaration of contractual rights etc. as remedies for breach of

**Table 24-2 Recent Amendments to the Economic Contract Law (1982)**

<b>Before Amendments</b>	<b>After Amendments</b>
expressly applicable to legal persons only	applicable to all range of entities, e.g. individuals
reference to stat plan throughout the law	such references have been reduced to a minimum
reference to price control and superior department-in-charge throughout the law	such references have been reduced to a minimum
either party may apply for administrative body for mediation as arbitration, the other party may challenge the decision of that body in court	dispensed with administrative body: either party may go to court unless agreed to arbitrate



contract. The CIETAC Arbitration Rules (1988) and the Civil Procedure Law (1991) have provided for a fairly efficient system for enforcement of contractual rights. China has also acceded to the New York Convention for Enforcement of Arbitral Awards and signed various bilateral judicial assistance treaties.

Notwithstanding the recent initiatives, further developments in the freedom of contract is still necessary. For example, (1) individuals must first obtain business licence before entering into business contracts; (2) only companies with "foreign trade capacity" may sign contracts with foreign companies; (3) courts have greater power to intervene on the terms agreed by the parties on grounds of unfairness.

***d. Rule of Law, Administrative Rules and Law Enforcement***

With China on the way to further develop its legal system and various laws to match the operational requirements in a market economic system, the rule of law and the enforcement of law should deserve special attention. Here, a clear distinction has to be drawn between the rule of law and administrative directives/rules. Of equal importance is the openness of the law system.

As regards openness, in not a few areas, China still lacks a clear and open comprehensive system of laws instead, there are numerous unpublished internal administrative rules which makes outside parties impossible to understand China's decision making process and organizational structure. This made the various process of communication, transaction, settlement of dispute etc. all function as if they are in a state of "black box operation". During the study team's visits, we had experienced instance such as pre-confirmed air tickets were not honoured which had caused inconvenience and delays. It is thus clear that apart from a well defined set of laws, it is most important that they can and are enforced. The successful implementation of the rule of games will help to cut resources which will otherwise be wasted.

**C. Standards and Practices**

If we consider the legal system or the enterprise reform agenda as the hardware of the institutional reforms, then, the set of imperatives, mode of operations, approaches and practices among individuals, organizations and the government, which are less formal, may perhaps be collectively termed the "software" of the reform.

Again, we would like to draw on two of our observations to illustrate these reform elements. First, on income disparities, we learn from our visits that the average taxi driver in Beijing earns a monthly income of about RMB 1000 yuan whereas the salary of a mid level government official who is entrusted with certain levels of responsibilities is less than RMB 500 yuan. We were therefore not surprised to find that "side line business" becomes very popular in many organizations as well as government bodies. In Wuhan, we learn that the standard fare for a rail journey to Guangzhou is RMB 280 yuan. However, it would be impossible to buy a ticket from the station ticket counter because nearly all the tickets are on the back market. Instead, Wuhan citizens would go via the back door, paying an extra 100 yuan or so to buy that same ticket. Such are the practices in the developing system and surprisingly, we were told that this is still considered acceptable to many Wuhan residents -- the reason being that they at least know at what price they should now pay in order to secure a train ticket.

For most of us, it is thus no strange matter to learn that the catch phrase "Xiang Qian Kan" (Forward looking) quickly become "Xiang Qian Kan" (Money Seeking). Perhaps, there is nothing fundamentally wrong in the latter, provided that the means and ways, in which are referred loosely here as the standards and practices, follow a clear set of institutional instruments.

## **SOME INITIAL VIEWS**

After the above brief examination of the institutional changes in China, we would now revisit the analytical framework described above. Scalapino<sup>5</sup> in his recent talk on the changing political and economic face of the Asia-Pacific advanced that at least three different political systems exist in Asia, viz., Leninism, Authoritative Pluralism and Democracy.

The introduction of intermediate systems highlighted the simplistic nature of the original model. This has further provided some cue in observing the likely direction of development of China's economic system. In considering a modified classification of the political-economic systems, it is perhaps also relevant to say that in the world today of rapid developments and changes, one has to view the political-economic system as a dynamic system where political and economic forces are continuously changing and shaping new relationships.

Before we end this brief discussion, we suggest that China's contemporary economic reform must have impact on Hong Kong. Hong Kong's re-exports to China and of China's origin must be good indicators of the impact of the

Table 24-3 Revised Analytical Framework

		Political System		
		Polyarchic	Authoritative Pluralism	Authoritarian
Economic System	Centralized Planning	Plan Rational		Plan Ideological
	Mixed			
	Market Oriented	Market Rational		Market Authoritarian

Table 24-4 Hong Kong's Re-Exports to China and of China's Origin

	1991	1992	yoy%
Hong Kong's Re-Exports to China (HK\$ million)	153,318	212,105	1.38
Hong Kong's Re-Exports of China Origin (HK\$ million)	315,688	403,782	1.28

Source : *Hong Kong Trade Development Council*

reform policies. Hong Kong has benefited greatly because of locational advantage and the linkages with the vast hinterland.

In return, Hong Kong, which has well developed financial institutional framework, is an important place of capital formation in China. Given other factors of productions such as land, labour are abundant, China needs capital urgently for her economic development. The Government is working hard to tap both the domestic saving as well as international capital. In the past year, funds are already being channelled into the stock/bond market or via direct project investment.

But apart from this seemingly very functional purpose, we further believe that the government-business relationship in Hong Kong, as signified by Hong

Kong's high growth in the past, should in many ways provide useful experience to China in the development of a market economy system. As Johnson has analyzed, the model's elements are, first, stable rule by a political-bureaucratic elite not acceding to political demands that would undermine economic growth; second, cooperation between public and private sectors under a loose framework of overall guidance by the government; third, heavy and continuing investment in education for everyone, combined with policies to ensure the equitable distribution of the wealth created by high-speed growth; and fourth, a government that understands the need to use and respect methods of economic intervention based on the price mechanism (Johnson, 1988).

This brief study of the UGA opens up many issues which are very worthwhile for further studies. If our initial views could in any way contribute to the debate in China about its political and economic development, it would have more than out-weighed our efforts.

## NOTES

1. For the purpose of obtaining updated information, a delegation of the UGA study team visited Beijing, Shanghai, Wuhan and the Pearl River Delta region in the past year. During these visits, they met municipal officials, experts and academics when they had useful discussion and exchange of views. They also saw many newly emerging things which are the results of the new economic initiatives. "Chinese Cities 2001", *Interflow*, August 1993 Issue.
2. JOHNSON, Chalmers (1982), *MITI and the Japanese Miracle*, Stanford: Stanford University Press, pp. 17-18.
3. LINDBLOM, Charles E (1977), *Politics and Markets - The World's Political-Economic Systems*, p.161 and JOHNSON, Chalmers (1982), *ibid.*, p. 18.
4. MYERS, Ramon H. (1988), "Property Rights, Economic Organization and Economic Modernization during the Economic Reforms" in Bruce L. REYNOLDS (ed.) *Chinese Economic Policy: Economic Reform at Midstream* (A Professors World Peace Academy Book), New York: Paragon House, pp.137-162.
5. Speech by Robert Scalapino at the Asian Regional Leadership Symposium held on 23 October 1993 in Hong Kong (unpublished).

## **REFERENCES**

- JOHNSON, Chalmers (1982), *MITI and the Japanese Miracle*, Stanford: Stanford University Press.
- JOHNSON, Chalmers (1988), "Political Institutions and Economic Performance: the government-business relationship in Japan, South Korea and Taiwan," in Jurgen DOMES and Yu-ming SHAW (eds.), *Hong Kong: A Chinese and International Concern*, London: Westview Press.
- LINDBLOM, Charles E. (1977), *Politics and Markets - The World's Political-Economic Systems*, New York: Basic Books, Inc., Publishers.
- MYERS, Ramon H. (1988), "Property Rights, Economic Organization and Economic Modernization during the Economic Reforms" in Bruce L. REYNOLDS (ed.), *Chinese Economic Policy: Economic Reform at Midstream*, A Professors World Peace Academy Book, New York: Paragon House, pp.137-162.
- NORTH, Douglass C. (1988), *Structure and Changes in Economic History*, New York and London: W.W. Norton and Co..

X08941193

