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Introduction

Nobuhiro Okamoto and Takeo Ihara

In 1999, the then Chinese President Jiang Zemin declared his policy of 'Western Area Development', which aimed to achieve economic development for the western region in China. This masked a substantial change in regional development policy in China. After the central government of China had implemented an 'open door' policy, China then applied the 'Step Ladder policy' for regional development. The intention of this policy was to start by developing the coastal region, and then to move on to the development of the interior regions. In practice, the coastal regions of China have developed rapidly, but the interior regions have been relatively underdeveloped. The regional disparities that have resulted have been one of the main concerns for policy planners at both national and regional levels as well as researchers both inside and outside China. This is the main reason why so many regional scientists or analysts have begun to study regional development in China.

In recent years, there have been a number of outcomes of study on regional development in China and on the economic disparities among Chinese regions. Earlier contributions came from Tsui (1991) and Lyons (1991), both of which measure the disparities in regional economies, and Tsui (1993) and Lee (2000), who decomposed the regional disparity into inter-provincial, intra-provincial and urban–rural disparities. Ying (1999) and Akita, Kawamura and Xie (1999) used the Theil index to examine the contents of regional disparities. From the viewpoint of new economic growth theory, Jian, Sachs and Warner (1996), Raiser (1998) and Yao and Zhang (2001) attempt to identify the mechanism of convergence and divergence of regional disparities. With the development of new economic geography or spatial economics in recent years, the concept of 'space' has been embraced keenly by a number of economists and applied to China's regional development problems. For example,

Chen (1996), Ding (1999), Cheng and Kwan (2000) and Belderbos and Carree (2002) have all discussed the location of foreign direct investment. Similarly, Golley (2002) discussed regional development, based upon the concept of 'cumulative causation hypothesis'. Furthermore, industrial agglomeration in a specific region has also become a focus of considerable attention. Marukawa (2001) tried to explain why there had been a process of industrial agglomeration in Shaoxing and Wenzhou, while Kimura (2003) analysed the relation between agglomeration and development as a whole, and Chen (2002) measured the extent of external economies of agglomeration. Spatial interaction has also been an important issue in interpreting interregional development: Zhang and Felmingham (2002) and Brun, Combes and Renard (2002) tried to measure the spillover effect from the coastal region to the interior region. However, this literature has yet to produce concrete conclusions and it should also be noted that there is a lack of acknowledgement of both inter-industrial linkages and its spatial interactions among the regions in these literatures.

In addition, the literature on regional development in China can be divided into the following two streams, according to the data which are used. One involves the analysis of regional inequalities, which focuses on the measurement of inequality by using such regional macro-data as production accounts, GDP, employment, and so on. The other uses regional micro-data, which can be derived from special survey on established agency or personal levels. Among others, interregional input–output data can be regarded as the combined data with macro and micro data. And hence, it can be seen as perhaps the best method to use in analysing such economic situations.

However, to date only two studies (Akita, Yue and Kawamura 1999; Ichimura and Wang 2003) have approached the situation from an interregional input–output context. Akita, Yue and Kawamura (1999) compiled a two-region model using non-survey methods. Ichimura and Wang (2003) constructed a seven-region model for the year 1987. It is still very important for us to capture regional economic developments from the viewpoint of spatial interaction. Clearly, this means that there might be great potential in these empirical studies, in which the regional development in China can be examined very carefully by using interregional input–output tables.

In this book, the chapters are organized as follows.

Part I, composed of two chapters, will discuss the methodology and data estimation of interregional input–output data, which have become the main tools used in analysing regional development in China. Chapter 2, entitled 'How to Utilize Interregional Input–Output Analysis

in China', by Takeo Ihara, will consider the reason why the interregional input–output approach has not yet been fully developed in China, and will suggest the future development of application methods in this field. In Chapter 3, 'Non-Survey Methods for Estimating Regional and Interregional Input–Output Multipliers' by Nobuhiro Okamoto and Yaxiong Zhang in association with Kun Zhao, the estimation method of input–output multipliers with non-survey methods will be discussed reflecting the present situation in which it is not always easy to access regional data in China.

In contrast, Part II will focus on the analysis of various regional development problems by using an interregional input–output framework, specifically that developed as the Multi-regional Input–Output Model for China (CMRIO) (Institute of Developing Economies 2003). Chapter 4, 'Analysis of the Characteristics of Regional Development of the Society and Economy in China', by Shantong Li and Yongzhi Hou, focuses on the region's own characteristics or initial conditions for economic development and identifies its regional development process, then, in Chapter 5, 'The Differential Factors of Regional Development in China – a DPG Approach', by Takaaki Kanazawa, will explore the important factors of its economic development in each region. Spatial linkage between regions will be examined in Chapter 6, 'Spatial Linkages of the Chinese Economy', by Wenqing Pan and Qiyun Liu. According to the present situation of inequality of regional agglomeration, Chapter 7, 'Agglomeration, Intraregional and Interregional Linkages in China', by Nobuhiro Okamoto, tries to identify the linkage structures in the region where industrial agglomeration occurred. The final two chapters discuss the spread of economic development from the developed (core) region to the undeveloped (periphery) region based on the framework set out by Hirschman (1958) and Myrdal (1957). Chapter 8, 'The Magnitude of Interregional Input–Output Spillover Effects in China and its Implications for China's Uneven Regional Growth', by Shiro Hioki, discusses regional development policy from the viewpoint of the 'spread' or 'trickle-down' effect, according to the spatial repercussions of final demand, and Chapter 9, 'The Spillover and Feedback Effects between Coastal and Non-coastal Regions', by Yaxiong Zhang and Kun Zhao, measures the spillover and feedback effect between the regions. Finally we summarize our findings and clarify the achievements of this book.

The empirical analysis in Part II makes use of the same sector classification and regional definition of CMRIO. The 17 sector classification is used in most instances, except for Chapter 7, and eight regions are defined, except in Chapter 9 (see Table 1.1 and Figure 1.1).

Table 1.1 Sector classification

17 sectors		*Basic sector classification*	
1	Agriculture	1	Agriculture
2	Mining	2	Coal mining and processing
		3	Crude petroleum and natural gas products
		4	Metal ore mining
		5	Non-ferrous mineral mining
3	Food products	6	Manufacture of food products and tobacco processing
4	Textile and wearing apparel	7	Textile goods
		8	Wearing apparel, leather, furs and related products
5	Wooden products	9	Sawmills and furniture
6	Paper and printing	10	Paper and products, printing and record medium reproduction
7	Chemical products	11	Petroleum processing and coking
		12	Chemicals
8	Non-metallic mineral products	13	Nonmetal mineral products
9	Metal products	14	Metals smelting and pressing
		15	Metal products
10	Machinery	16	Machinery and equipment
11	Transport equipment	17	Transport equipment
12	Electronic products	18	Electric equipment and machinery
		19	Electric and telecommunications equipment
13	Other manufacturing products	20	Instruments, metres, cultural and office machinery
		21	Maintenance and repair of machinery and equipment
		22	Other manufacturing products
		23	Scrap and waste
14	Electricity, gas and water supply	24	Electricity, steam and hot water production and supply
		25	Gas production and supply
		26	Water production and supply
15	Construction	27	Construction
16	Trade and transport	28	Transport and warehousing
		29	Wholesale and retail trade
17	Services	30	Services

Source: Institute of Developing Economies–JETRO (2003, p. 24).

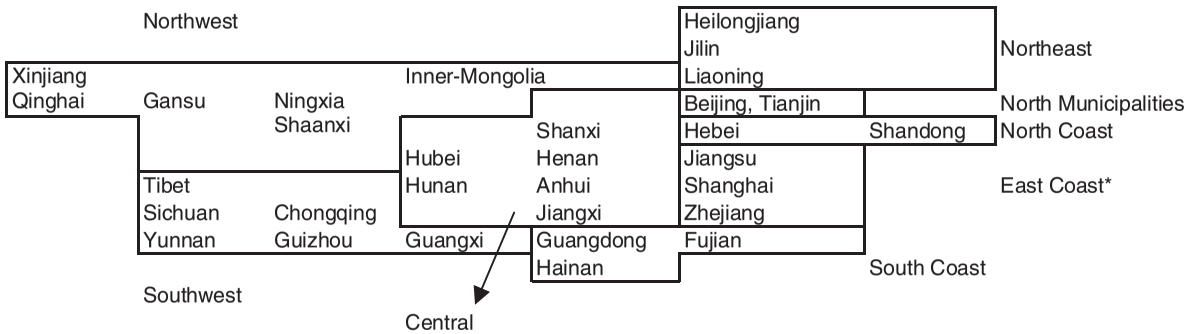

Figure 1.1 Regional definition

Note: * East Coast was named Central Coast in CMRIO (IDE 2003). However, we use 'East Coast' according to the usage of Chinese in this research.

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Notes: f = figure; n = note; t = table; **bold** = extended discussion or heading emphasized in main text.