

Urbanization and the Changing System of Cities in Socialist China:

A Historical and Geographic Assessment

中國城市化與城市體系之時空背景評估

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Abstract

Globalization and market reforms have significantly facilitated urbanization of the population of the People's Republic of China. This study assesses the structural and spatial redistribution of urban population and Chinese cities since the founding of the People's Republic in 1949. Prior to the 1978 economic reforms, the system of cities created by the Maoist regime was dominated by large and extra-large cities because of the imperatives of optimal industrialization. For national defense considerations, most of the new cities were created in the central and western interior rather than the eastern coast. Market reforms and relaxation of state control over local development since the late 1970s have allowed a large number of small cities to flourish on the basis of bottom-up rural transformative development. The intrusion of global market forces has helped re-consolidate the dominance of the east coast in China's urban development. Although small cities and towns have absorbed large number of rural migrants, large and extra-large cities have remained the most efficient and productive economic centers for capital

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investment and production. China's urban development over the past five decades has been a direct outcome of state articulation and reconfiguration against different political and economic contexts. A superimposed dual-track system of urban settlements integrating the Maoist legacy of large city dominance at the top with the rapidly expanding component of small cities and towns at the bottom is quickly taking shape to characterize China's urban development and urbanization.

Key Words: population studies, urbanization, migration, city planning,
China

Abstract

Globalization and market reforms have significantly impacted the urbanization of the population of the People's Republic of China. This study assesses the structural and spatial reformation of urban population and Chinese cities since the founding of the People's Republic in 1949. Prior to the 1978 economic reforms, the system of cities created by the Maoist regime was dominated by large and extra-large cities because of the imperatives of optimal industrialization. The national defense considerations, most of the new cities were created in the central and western interior rather than the eastern coast. Market reforms and relaxation of state controls over local development since the late 1970s have allowed a large number of small cities to flourish on the basis of bottom-up rural transformation. The intrusion of global market forces has helped to consolidate the dominance of the east coast in China's urban development. Although small cities and towns have absorbed large numbers of rural migrants, labor and entrepreneurship cities have remained the most efficient and productive economic centers for capital

摘要

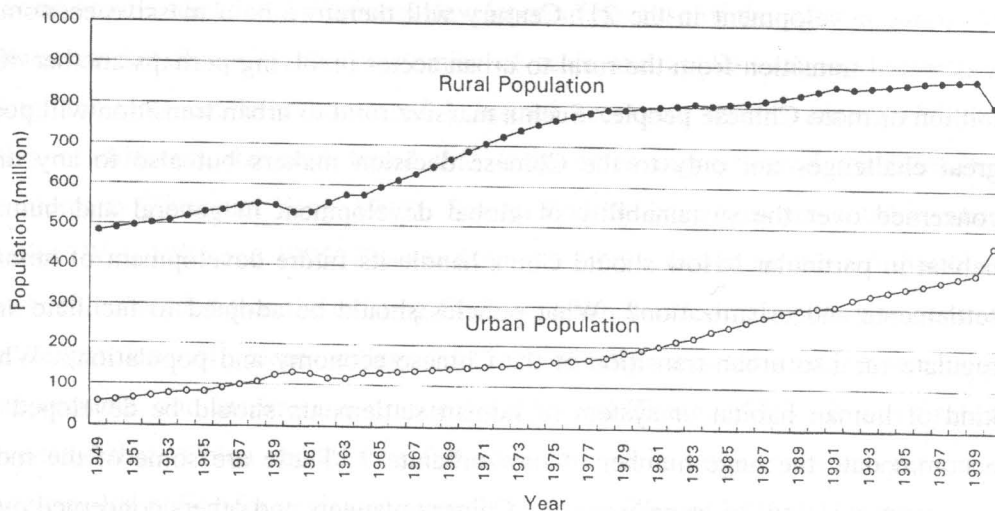
經濟改革和全球化加速了中國大陸人口的城市化，本文評估中國大陸自 1949 年以來城市人口和城市體系之結構性和空間性重組。在 1978 年改革以前，中國的城市體系向以大都市所主導，出於國防的考慮，大多數新建城市集中在中部和西部地區。近年經濟改革和政治放權給予大量的小城市新的發展空間，與此同時，全球化的力量進一步鞏固東部地區在中國城市化的領導地位，無數小城市和城鎮接納了大量的農村剩餘人口，然而大都市依然是投資和生產最有效的經濟中心。中國過去 50 年的城市發展深為政府干預所左右，改革開放前大都市的主導地位與改革開放後小城市的迅猛發展互相結合和重疊，形成現時獨特的中國雙軌城市體系。

關鍵字：人口研究、城市化、人口遷移、都市規劃、中國大陸

I. INTRODUCTION

Despite the difficulty of defining urban population and urbanization in China, it has been generally understood that China has experienced accelerated urbanization as a result of market reforms and opening up of the socialist economy over the past two decades (Pannell, 1995; Logan, 2002). When market reforms were initiated in 1978, China reportedly had an urban population of 172.45 million which accounted for 17.92 percent of the total population of the country (CSSB, 2000a, pp. 95¹). The latest census in the year 2000 raised China's urban population to 455.94 million and its percentage to 36.09 percent (*South China Morning Post*, 29 March 2001, pp. 10). It remains unclear to what extent China's increased urban population should be attributed to such arbitrary factors as administrative changes and modification of the urban definition. Nevertheless, an analysis of comparable statistical data since 1982 does show a noticeable trend in which the growth of urban population outpaced that of its rural counterpart (Figure 1). This trend of accelerated urbanization since the reforms has been unprecedented in the history of the People's Republic. Within a time span of less than two decades, the share of urban population rose from 21 percent in 1982 to 36 percent in the year 2000. This stood in contrast with the pre-reform era when the share of urban population showed a marginal increase from 10.6 to 17.9 percent over the thirty years of 1949-78 (Ma and Cui, 1987; Chan, 1994; Zhang and Zhao, 1998).

¹ Prior to 1982, urban population in China was defined as the population living in the urban administrative boundaries of cities and towns. Since 1982, China has adopted a modified version of the urban definition to refer to the permanent residents of urban districts and resident committees of cities and towns. This modification of the urban definition in 1982 did not result in major alternation of either the total number of urban population or its share in the total population, however. See China State Statistical Bureau, 2000b, pp. 111. For detailed discussion of China's changing urban definition, see Kirkby, 1985; Ma and Cui, 1987; Goldstein, 1990; Chan, 1994; Zhang and Zhao, 1998.



- Sources: 1. China State Statistical Bureau, 2000, *China statistical Yearbook(2000)*, Beijing: china Statistical Press, pp.95;
 2. *South China Morning Post*, 29 March 2001, pp.10;
 3. Ma and Cui, 1987, Administrative changes and urban population in China, *Annals of the Association of American Geographers*, pp.388.

Figure 1 Urban and Rural Population in China, 1949-2000

Because of its enormous population size, China's accelerated urbanization over the last two decades and in the foreseeable future will have significant economic, social, and environmental implications not only for the largest developing nation itself but also for the globalizing world. With one fifth of the human population and about 15 percent of the world's total urban population, China has more people living in cities and towns than any other country (Lo, 1987; Pannell, 1995). This huge number of urban population, currently accounting for only 36 percent of the Chinese people, has yet to claim its dominance in the nation and will likely expand to reach the majority of China's population if the current trend of globalization and market reforms continues. The outcome of continued

economic development in the 21st Century will therefore be a massive economic and spatial transition from the rural to urban sector involving perhaps another 400 million or more Chinese people. Such a massive rural to urban transition will pose great challenges not only to the Chinese decision makers but also to any one concerned over the sustainability of global development in general and human habitat in particular. How should China handle its future development of human settlements and urbanization? What policies should be adopted to facilitate and regulate rural to urban transition of the Chinese economy and population? What kind of human habitat or system of human settlements should be developed to accommodate the huge number of new urbanites? These are some of the most important questions to be answered by Chinese planners and others concerned over global development.

China's accelerated urbanization in recent decades has also been a subject of considerable scholarly interests and heated debates (Ma and Hanten, 1981; Pannell, 1990 and 1995; Wei, 1995; Chen and Parish, 1996; Tang, 1997; Lin, 1994 and 1998). At least three major corpuses of literature or three schools of thought have emerged as a result of continued scholarly inquiry and interpretations. First, there is the notion of large cities as the natural centers of economic growth, modernization, and urbanization. For years, the Chinese urbanization strategy has been to "strictly control the growth of large cities, rationally develop medium-sized cities, and vigorously promote the development of small cities and towns" (Kirkby, 1985; Ma and Lin, 1993). As China shifted its development strategy from the rhetoric of egalitarianism into realistic promotion of comparative advantages, a growing number of scholars have become critical of the policy to control the expansion of large cities. Researchers within and outside China have suggested that large cities function as the most efficient center of growth or most powerful

driving engine for China's national development because of the operation of such natural market forces as the economies of scale and agglomeration. Zhou and Yang, for instance, have compared industrial economic returns among Chinese cities of different size and found that large cities outperformed their smaller counterparts (Zhou and Yang, 1995). Similar findings have been presented in other studies (Wei, 1994 and 1995; Zhao and Zhang, 1995). Based on these findings, it has been contended that the existing Chinese urban development policy to control the expansion of large cities "is theoretically misinformed, historically inappropriate, and incorrect in practice" (Zhao and Zhang, 1995). It was further advocated that "China should take full advantage of its large cities and pursue a large-city-led policy for its development" (Zhao and Zhang, 1995). The arguments along this line of thinking may be conceptualized as a model of "urbanization from above" as the idea essentially represents an extension of the paradigm of "development from above" which advocates a growth pole or growth center strategy for the pursuit of efficient economic expansion (Hansen, 1981).

The second perspective focuses on the revitalization and explosive growth of numerous small towns in China since institutional changes were made in 1978. Fei Xiaotong, a leading Chinese sociologist, has maintained that the numerous *small* towns have actually played a role of *great* significance in China's urbanization because they function as "storage reservoirs" to accommodate the enormous surplus rural laborers and prevent them from flooding the large cities that already suffered from congestion (Fei, 1986). The phenomenal growth of China's small towns since the reforms has received great attention from scholars of the west (Kwok, 1982; Tan, 1986; Lin, 1993; Lin and Ma, 1994). The development of China's small towns has been understood as primarily a bottom-up phenomenon facilitated by such forces as the spontaneous marketization of the rural economy,

dramatic growth of township and village enterprises (TVEs), reduced state involvements in local economic affairs, and relaxed restriction on village-town migration (Ma and Lin, 1993). This pattern of urban transition based on small towns has been conceptualized as "urbanization from below" (Ma and Fan, 1994), an extension of the paradigm of "development from below" (Stohr, 1981).

Finally, there is the model of metropolitanism or extended metropolis enthusiastically advocated by McGee and Ginsburg (McGee, 1991; Ginsburg, 1990). The models of "urbanization from above" and "urbanization from below" have both seen urban transition as a city-based process shaped by the forces of agglomeration economies and comparative advantages. McGee and Ginsburg have argued that the city-based model of urban transition may not be the only option for Asian urbanization. It has been observed that a distinct process of region-based urbanization has been taking place in the extended metropolitan regions of many Asian countries in recent years as a result of economic restructuring, influx of foreign capital investment, and revolutionary advances in telecommunication and transportation. This process has led to the formation of zones of intensive urban-rural mixture and interaction located in the area surrounding and between metropolitan centers. These extended metropolitan regions have become the locales where foreign investment and time-space compression are based. The emergence of these regions is believed to present a viable option and alternative for urban transition of many countries not only in Southeast Asia but also in East Asia and China as well (Zhou, 1991; Pannell, 1995; Lin, 2001a and 2001b).

Obviously, the complex mechanism of China's urban transition has been and will continue to be interpreted in different perspectives just as different segments of the giant elephant being examined by the blind man. While courageous efforts are made to search for paradigms and formulas to guide China's continuing urban

transition, there is a need to better understand in a systematic manner the dynamics of change experienced by China's cities and towns. There is also a need to update our knowledge about recent urban developments undergoing in the rapidly changing Chinese transitional economy. Without a good knowledge of what has been taking place in the development and restructuring of human settlements in recent decades, it must necessarily be limited to interpret urban transition in China or recommend sensible policies concerning China's future urbanization.

This study attempts to examine the structural and spatial changes of China's urban settlements since 1949. The objective is to identify the general pattern of change demonstrated by urban settlements of different size and in different regions of the country. Specifically, this study attempts to address three inter-related questions that have important bearings not only for a better understanding of urban China but also for planning and policy-making. First, what has been the role played by settlements of different size in China's urban development over the past five decades since the founding of the People's Republic? How has such a role changed under different historical context? How have Chinese cities of different population size reorganized themselves in response to major political and economic changes? Second, where were Chinese cities, both existing and newly established, located and relocated? What have been the locational changes experienced by Chinese cities as a result of shifting spatial emphasis of national economic development? Have Chinese cities become increasingly disperse and accessible to the population of a wider geographical extent or remained concentrated in the developed region of the coast? Finally, what are the implications of the structural and spatial changes of Chinese cities for both our understanding of the dynamics of urban development and formulation of policies to facilitate future urban transition?

Systematic data recently released by the Chinese statistical authorities have provided an important base for the analysis of structural and spatial characteristics of China's cities (CSSB, 1999; 2000b). Beginning in 1985, China's State Statistical Bureau has published annually detailed statistical data for all officially designated cities in the country (CSSB, 1985). In 1999, the State Statistical Bureau's Team of Urban Social and Economic Survey released systematic statistical data for Chinese cities for the years of 1949 to 1998 as an attempt to mark the 50th anniversary of the founding of the People's Republic (CSSB, 1999). These officially released data on urban China are not free of discrepancy and errors. Indeed, they need to be used with extra caution and cross-checked with other information. Nevertheless, these systematic data represent valuable source of information for understanding the temporal and spatial changes that Chinese cities have undergone since 1949. These two sets of data, the annual statistical yearbooks on Chinese cities and the 1999 collected volume on the growth of Chinese cities during 1949-98, form the base for this study. As Fan (1999) has correctly identified, Chinese cities have over the past several decades experienced dramatic expansion in two simultaneous dimensions. Vertically, existing cities of different size have expanded both in population and land area. Horizontally, a large number of newly designated cities has been added to the existing system of cities. For a consistent and comparable analysis of the vertical expansion of Chinese cities, this study uses data from the annual statistical yearbooks on Chinese cities to analyze temporal and spatial changes of the SAME 295 cities in the country since 1984. This approach is adopted to avoid the distortion of administrative changes particularly the addition of new cities. For an analysis of the horizontal growth of the system of cities including the addition of new cities,

this study is based on the volume of statistical data released in 1999 on the growth of Chinese cities since 1949.

Before the pattern of urban development in China is identified, several important concepts require clarification. In this study, the concept of urban transition is used to denote a process of structural and spatial change in which the Chinese population shift their occupation from agricultural to non-agricultural pursuits and their residence from villages to cities and towns. Urbanization is understood as a process of economic, spatial, and social change through which the Chinese rural population acquire an urban way of life with or without a relocation of residence. The confusion revolving around the definitions of the Chinese urban population has been extensively documented (Kirkby, 1985; Ma and Cui, 1987; Goldstein, 1990; Chan, 1994; Zhang and Zhao, 1998). This study adopts the official definition of urban population which refers to the permanent residents of urban districts, streets, and resident-committees of cities and towns (CSSB, 2000b, pp. 111). Statistical data on China's urban population are available since 1982. Data for China's urban population released before 1982 were based on the administrative boundaries of cities and towns. For the purpose of data consistency and comparability, this study will not examine the growth and distribution of temporary residents (*zhanzhu renkou*) (i.e. urban residents who do not have a urban household registration status or *hukou* but who lived and worked in the city) and floating population (*liudong renkou*) (i.e. visitors attending conferences, visiting relatives, or doing sightseeing in the city on a transient basis) because the issue has been analyzed in great detail elsewhere (Lin, 1997a; Lin, 1999a).

In this study, urban settlements refer to only those cities and towns that are officially designated as urban places. There were 667 designated cities and 19,184 designated towns in China in 1999 (CSSB, 2000a, pp. 347 and 369). Because of

the lack of detailed statistical data on designated towns, this study concentrates on the analysis of the temporal and spatial pattern of the Chinese cities with an officially recognized urban status. The assessment of the structural changes of Chinese cities is based on a classification scheme that groups all Chinese cities into four categories according to the size of nonagricultural population in the city proper (*shiqu feinongye renkou*), namely “extra-large” (1 million people or more), “large” (0.5 to 1 million), “medium” (0.2 to 0.5 million), and “small” cities (less than 0.2 million) (CSSB, 2000b, pp. 487). The spatial pattern is analyzed on the basis of a framework dividing the country into three zones, namely the east, central, and western regions (Figure 2).

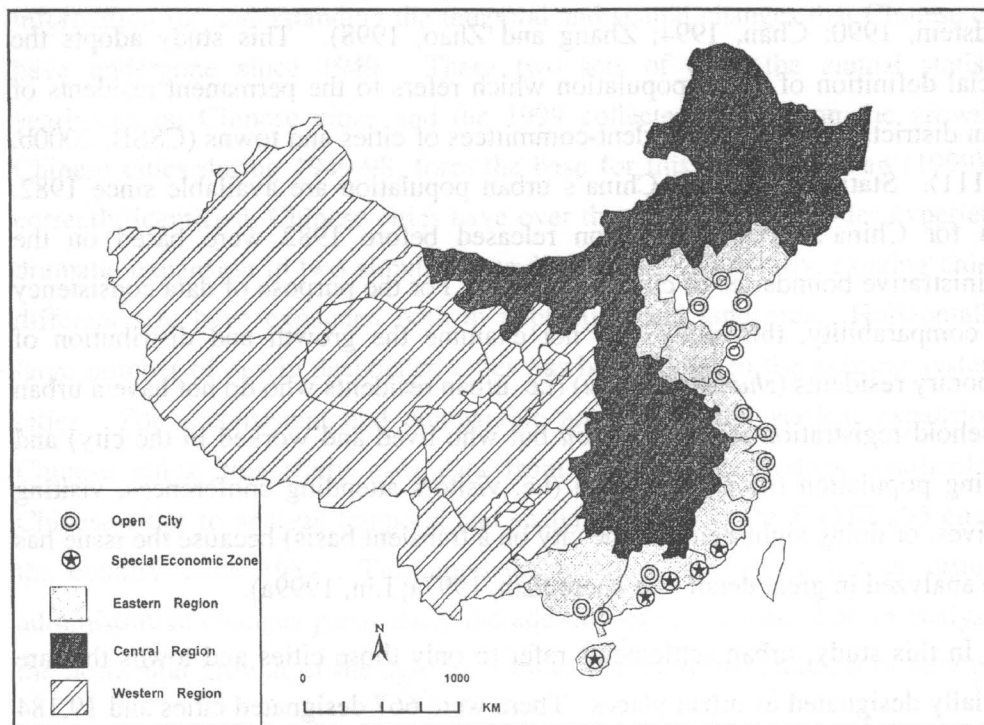


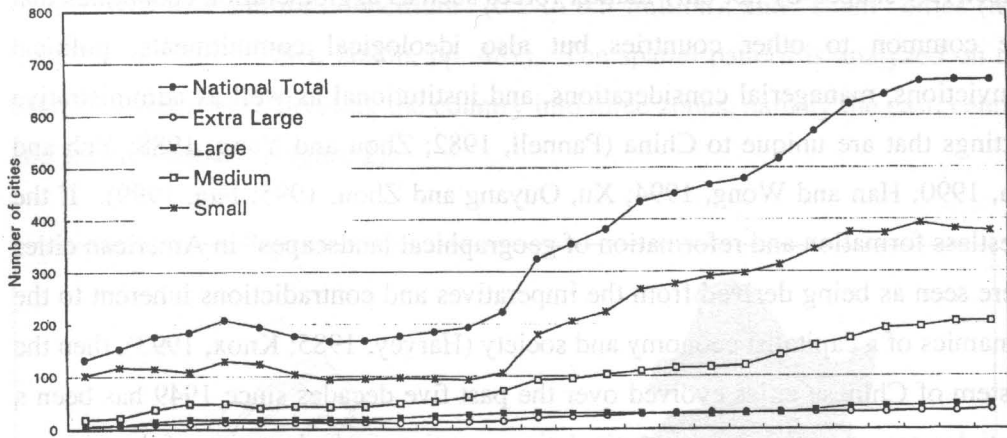
Figure 2 China's Three Macroregions, Open Cities, and SEZs

II. STATE ARTICULATION AND THE CHANGING SYSTEM OF CITIES

As several studies have correctly noted, cities in China have functioned as both economic and administrative entities (Ma and Hanten, 1981; Lo, 1987; Pannell, 1990; Hsu, 1994). The growth and distribution of cities are therefore effectively shaped by not only market forces such as agglomeration economies that are common to other countries but also ideological commitments, political convictions, managerial considerations, and institutional as well as administrative settings that are unique to China (Pannell, 1982; Zhou and Yang, 1988; Yeh and Xu, 1990; Han and Wong, 1994; Xu, Ouyang and Zhou, 1995; Fan, 1999). If the "restless formation and reformation of geographical landscapes" in American cities were seen as being derived from the imperatives and contradictions inherent to the dynamics of a capitalist economy and society (Harvey, 1985; Knox, 1993), then the system of Chinese cities evolved over the past five decades since 1949 has been a spatial outcome of the constant articulation, reaction, and adaptation of the Chinese Communist regime in response to the changing political and economic circumstances.

Cities in China are official establishments that require administrative designation and fiscal commitment of the governments. Officially designated cities are included in state budgetary allocation. They enjoy state capital investment in the urban economy and resources allocated by the government for the development and maintenance of urban facilities. Designation of new cities or demotion of the existing ones has therefore become a means for the state to either speed up or slow down the pace of urban development in response to changing political and economic situations. To understand the dynamic of urban

development in China, it is necessary to first analyze the changing number of designated cities. Figure 3 presents an overview of the growth of China's designated cities for the years of 1949-98. In general, cities in Communist China have gone through four distinct phases of expansion, contraction, stagnation, and explosion over the past five decades.



Source: China State Statistical Bureau, 1999. *New China's Cities Fifty Years*, Beijing: Xinhua Press, pp.8.

Figure 3 Distribution of Chinese Cities by Size, 1949-98

1. Initial Growth of Cities and Urbanization (1949-1961)

The initial period lasted from 1949 to 1961 and was characterized by a rapid increase of the number of cities and urban population. When the Communist took power in 1949, there were 132 cities with an urban population (defined as nonagricultural population in the city proper) of 27.4 million. Half of the cities were located in the eastern coast, more than the sum of those in the central and western regions. The rehabilitation and reconstruction of the national economy

after the civil war greatly facilitated the pace of industrialization and urban development. The 156 key construction projects financed by the central government during the First Five Year Plan (1953-57) provided great impetus to the expansion of existing cities and creation of new cities, most of them were located in the Northeast and North China (Lin, 1999a). By the end of the First Five Year Plan in 1957, the number of designated cities dramatically increased from 132 in 1949 to 176. The success of the First Five Year Plan was no doubt the result of original enthusiasm of the Chinese people to build a new nation. Unfortunately, this gave rise to unrealistic estimation, mis-management of the economy, and a development fever as the state under Mao launched the "Great Leap Forward" campaign to "catch up the US and overtake the UK in fifteen years". The idea essentially followed a large scale military action mobilizing all available resources to make a once-for-all developmental strike so that China could break out of the vicious cycle of poverty and backwardness (Eckstein, 1977; Lin, 1997a). The spatial outcome of this enormous campaign was a drastic growth of the number of cities from 176 in 1957 to 208 in 1961, reaching the climax for all years until 1980 (Figure 3). At the same time, urban population expanded from 54 to 69 million, a net growth of 15 million people in cities.

2. Reduction of Cities and De-urbanization (1962-1965)

The "Great Leap Forward" campaign turned out to be a great disaster. Economic mismanagement, natural catastrophes, and ideological dispute with the former Soviet Union in the early 1960s combined to result in tragic casualty of 15 to 30 million people. This was followed by a period of economic readjustment beginning in 1962 when a large number of cities previously established were eliminated from the list of state budgetary allocation and the excessive urban population were either deported or "sent down" (*xiaofeng*) to the countryside.

During the years of 1961-65, the number of cities dropped from 208 to 168, urban population declined from 69 to 66 million, and its percentage in the total population reduced from 10.5 to 9.2 percent. This period appeared to fit the pattern of de-urbanization identified by Murray and Szelenyi (1984) and Chen and Parish (1995).

3. Stagnation and Under-urbanization (1966-77)

The Great Proletariat Cultural Revolution that lasted from 1966 to 1976 was a period of revolutionary upheavals, power struggles, and domestic turmoil. In an attempt to relief the population pressure for urban employment and dissolve the destructive energy of the young revolutionary "Red Guards", Mao launched the campaign of "up to the mountains and down to the villages" (*Shangshan Xiexiang*) by which an estimated 12-17 million urban educated youths were forced to move out of the cities to resettle in rural villages or remote areas (Bernstein, 1977; Ma, 1977). Urban cadres, university professors, school teachers, artists, musicians, medical doctors, and other professionals in cities were also "sent down" (*xiafeng*) to the countryside to toughen their body and purify their soul. In the meantime, rapid industrialization based on a selected number of cities continued to be seen as essential to the expansion of military capacity and maintenance of national security. The result has been a rather unique pattern of industrialization without a parallel growth of urbanization (Ma and Hanten, 1981; Kirkby, 1985; Cannon, 1990; Chan, 1994). During the ten years of 1966-76, only 17 additional cities were designated, of which 16 were located in the central and western regions perceived to be strategically less vulnerable to potential military attack. Urban population in cities grew from 67 to 74 million, but its proportion in the total population dropped from 9 to 8 percent. The level of urbanization, defined as the proportion of the aggregate population in cities and towns in the total population, slightly declined

from 17.9 to 17.4 percent (Ma and Cui, 1987; Chan, 1994). This pattern fit nicely to the model of “under-urbanization” or zero urban growth identified by Murray and Szelenyi (1984) and Chen and Parish (1995). This pattern remained unchanged until institutional changes were initiated in the late 1978.

4. Accelerated Growth and Rapid Urbanization (1978-present)

The final and recent period since 1978 has been characterized by a rapid surge of the number of designated cities as a result of both relaxation of state control over city designation and the operation of spontaneous forces of market reforms and globalization. The transition of power from the Maoist plan-ideological into the post-Mao market-regulatory regime has ushered in a new development strategy that values efficiency over equity, individual creativity over collectivism, and regional comparative advantages over defense or ideological consideration (Fan, 1995 and 1997; Lin, 1997b). Recognition of the inherent economic comparative advantages of the cities, particularly those along the eastern coast, has led the government to set up four Special Economic Zones in 1979 and designate 14 coastal open cities in 1984.² Along with the two coastal provinces of Guangdong and Fujian, these cities were given greater autonomy to attract foreign investment and practice free market forces. They were seen as catalysts of development, pioneers of economic reforms, and centers of modernizations (Yeung and Hu, 1992; Pannell, 1992; Wu, 1999). This new development strategy has created an environment favorable to the growth of cities. At the same time, the adoption of an output-link agricultural production responsibility system in the countryside has greatly raised productivity and released a large number of surplus

² The four Special Economic Zones established in 1979 included Shenzhen, Zhuhai, Shantou, and Xiamen. In 1988, Hainan Island, previously part of Guangdong Province, was designated as the fifth and largest Special Economic Zone. The locations of China's Special Economic Zones are mapped in Figure 2. For detailed discussions, see Yeung and Hu, 1992; Wu, 1999.

rural laborers. Decollectivization has allowed a growing marketization of the agricultural sector and spontaneous industrialization of the countryside. Agricultural restructuring and rural industrialization have led numerous towns to flourish and mushroom all over the country. Rural development from below has provided tremendous impetus for the upgrading of towns into cities and expansion of small cities. In response to the growing demand for urban development, the Chinese government has since 1984 relaxed its control over the designation of cities³. During the years of 1978-84, for instance, the Chinese government designated 78 new cities and redesignated 32 cities which were demoted earlier for political or economic reasons (Ma and Cui, 1987). The combined outcome of the above three factors, a new development strategy in favor of cities, market driven rural industrialization, and relaxed state control over city designation, has been an explosive surge of the number of cities and urban population (Figure 3). The number of cities drastically rose from 193 in 1978 to 668 in 1998, an increase of 475 new cities in twenty years, far greater than the 61 new cities established over the previous three decades. Urban population in cities also surged from 79.8 million in 1978 to 217.7 million in 1998 and its share of the total population rose from 8.3 to 18 percent. Clearly, China since 1978 has been set on the path of rapid growth of cities and accelerated urbanization.

How has the Chinese system of cities reorganized itself as a consequence of the changing political economy of the nation outlined above? Tables 1 and 2 analyze the growth of cities of different size and different location over the past

³ The designation of cities in China has been handled by the Ministry of Civil Affairs. In 1984, the Ministry relaxed its criteria for city designation. These relaxed criteria were approved by the State Council and disseminated in a 1986 circular titled "On Adjustment of Standards for City Designation and Conditions for City to Administer Counties." For a detailed discussion, see Hsu, 1994, pp. 516.

fifty years using 1978 as a watershed dividing the pre-reform and post-reform periods. When the People's Republic was founded in 1949, the system of cities that the Communist regime inherited had only a few large cities (12 large and extra-large cities, see Table 1) although these large cities accounted for more than half (54 percent, see Table 2) of the total urban population in cities. The majority of these cities, both in number and population, were located in the eastern coast where modern urbanism was first brought into the Middle Kingdom by western colonial powers. This system of cities was reorganized by the Communist regime in two ways.

First, large and extra-large cities enjoyed significant expansion whereas the growth of small cities was restrained. During the years of 1949-1978, the number of large and extra-large cities increased from 12 to 40 and their share of the total urban population expanded from 54.8 to 62.5 percent (Tables 1 and 2). For the same period, the number of small cities dropped from 102 to 93 and their share of the total urban population shrank from 25.4 to 14.1 percent. Large and extra-large cities enjoyed an annual growth rate higher than the average whereas small cities suffered from contraction (Table 1). This pattern of structural change has been the result of political and economic considerations. Politically, most of the large and extra-large cities corresponded with China's 30 provincial capitals and special municipalities. They were developed as the most important political centers to maintain territorial integrity and social stability (Lin, 1999a). Economically, the centrally planned economic system established by the Maoist regime had to rest upon a hierarchical urban system integrated by vertical linkages and coordinated by large cities. Large and extra-large cities were developed as the most important centers of production for the planned economy and the state sector. They were selected by the state for concentrated investment in industrial production because

of the advantages they had over other smaller settlements in terms of their economic infrastructure and agglomeration economies (Wu, 1967). For the same reasons, the contraction of small cities in the Maoist era had been the outcome of the socialist strategy that managed to jointly maximize industrialization and minimize urbanization costs. As a number of scholars have correctly noted, the approach adopted by the Maoist regime for urban development was essentially to preserve the limited capital for industrial growth in existing cities at the expense of both agriculture and urban consumption (Kirkby, 1985; Chan, 1994). This growth-oriented and urban-biased approach meant that the state could not afford to upgrade many rural settlements into the city status because such an upgrading might burden the state in the provision of urban services which in turn would jeopardize the grand pursuit of optimum industrialization.

Table 1 Number of Chinese Cities by Size and Location, 1949-98

	Number of Cities			Annual Growth (%)	
	1949	1978	1998	1949-78	1978-98
City Size (Non-agricultural Population in City Proper)					
Extra-Large (>1 million)	5	13	37	3.35	5.37
Large (0.5 - 1 million)	7	27	48	4.76	2.92
Medium (0.2 - 0.5 million)	18	60	205	4.24	6.34
Small (<0.2 million)	102	93	378	-3.18	7.26
Region					
East	69	69	300	0.00	7.63
Central	50	84	247	1.81	5.54
West	13	40	121	3.95	5.69
Total	132	193	668	1.32	6.40

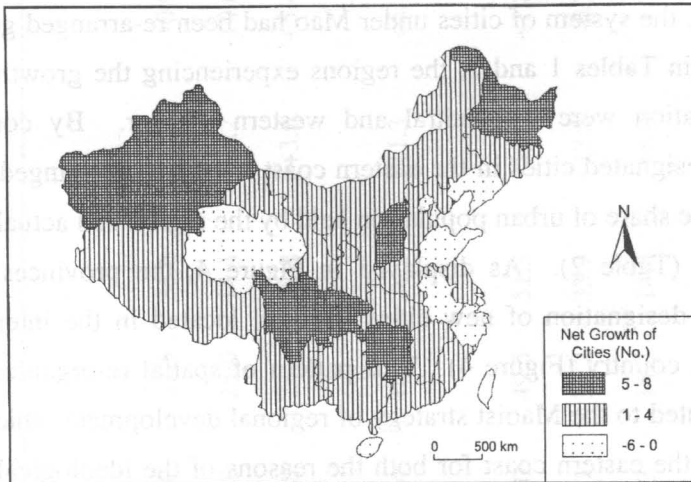
Source: China State Statistical Bureau, Team of Urban Social and Economic Survey, 1999. *New China's Cities Fifty Years*, Beijing: Xinhua Press, pp. 6-8.

Table 2 Chinese Cities by Size and Location, 1949-98

City Size	Non-agricultural Population in City Proper (Million)				Structure (%)				Percent Change (%)	
	1949	1978	1998	1949	1978	1998	1949-78	1978-98		
(Non-agricultural Population in City Proper)										
Extra-Large (>1 million)	9.8551	29.9377	79.601	36.0	37.5	36.6	+1.5	-0.9		
Large (0.5 - 1 million)	5.1468	19.9451	31.343	18.8	25.0	14.4	+6.2	-10.6		
Medium (0.2 - 0.5 million)	5.4283	18.7147	62.723	19.8	23.4	28.8	+3.6	+5.4		
Small (<0.2 million)	6.9755	11.2691	44.094	25.4	14.1	20.2	-11.3	+6.1		
Region										
East	18.9061	39.5439	111.6310	69.0	49.5	51.3	-19.5	+1.8		
Central	5.6816	27.2843	73.7940	20.7	34.2	33.9	+13.5	-0.3		
West	2.8180	13.0384	32.3363	10.3	16.3	14.8	+6.0	-1.5		
Total	27.4057	79.8666	217.7613	100.0	100.0	100.0				

Source: China State Statistical Bureau, Team of Urban Social and Economic Survey, 1999. *New China's Cities Fifty Years*, Beijing: Xinhua Press, pp. 19-20.

Second, the system of cities under Mao had been re-arranged geographically. As revealed in Tables 1 and 2, the regions experiencing the growth of cities and urban population were the central and western interior. By comparison, the number of designated cities in the eastern coast remained unchanged for the entire period and the share of urban population held by the region had actually reduced by 19.5 percent (Table 2). As displayed in Figure 4, the provinces that enjoyed considerable designation of new cities were all located in the interior or border region of the country (Figure 4). This pattern of spatial re-organization of cities can be attributed to the Maoist strategy of regional development which favored the interior over the eastern coast for both the reasons of the ideological commitment of spatial equality and national security (Fan, 1995 and 1997; Wei and Ma, 1996). In an hostile international environment, the eastern coast was perceived to be vulnerable to potential naval attacks (Cannon, 1990; Yeung and Hu, 1992). For the consideration of national defense, much of the state capital investment in the 1960s was concentrated in the "Third Front" located in the western interior (Naughton, 1988). It is thus not surprising that cities in the western region had demonstrated the highest annual growth rate while the eastern coast recorded a zero increase for thirty years (Table 1).

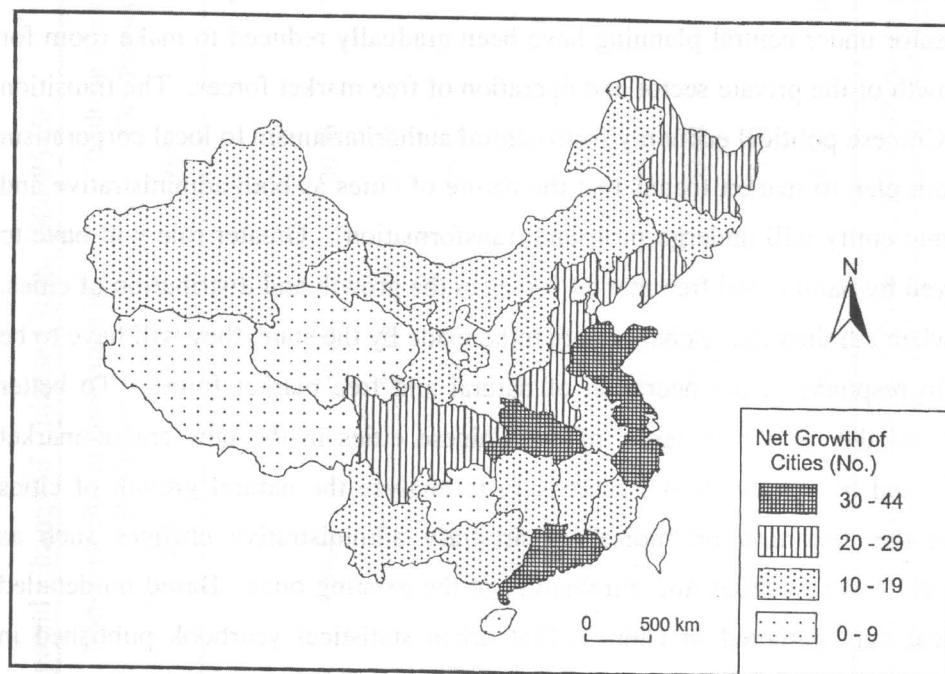


Source: China State Statistical bureau, Team of Urban Social and Economic Survey, 1999. *New China's Cities Fifty Years* Beijing: Xinhua Press, pp.3.

Figure 4 Growth of Cities in China, 1949-78

The trend of structural and spatial redistribution of cities identified above has been reversed since institutional changes were initiated in 1978. Whereas small cities suffered from contraction in the Maoist era, they have now become the most dynamic urban settlements among all with the highest annual growth rate (Table 1). The share of small and medium size cities in the total urban population has also shown a substantial increase at the expense of their large and extra-large urban counterpart (Table 2). Geographically, the eastern region has now demonstrated the highest growth rate in terms of the addition of cities (Table 1 and Figure 5). Its share of the total urban population in cities has expanded at the expense of other regions to reclaim its loss in the Maoist era (Table 2). Obviously, this remarkable reversal has been inseparable from the three powerful forces identified in the forgoing section, including the state's shifting development emphasis from the

interior to the eastern coast, phenomenal growth of rural industries and small towns from below, and relaxed control of the state over the upgrading of towns into cities.



Source: China State Statistical Bureau, Team of Urban Social and Economic Survey, 1999. *New China's Cities Fifty Years* Beijing: Xinhua Press, pp.3.

Figure 5 Growth of Cities in China, 1978-98

III. EXPANSION OF EXISTING CITIES

The Chinese system of cities evolved over the past five decades has been shaped by the articulation of the state through the means of investment strategy, administrative changes, and reclassification of urban population and urban settlements. Since the 1980s, however, the role played by the central state has

experienced significant changes as the national economy started to “grow of the plan” (Naughton, 1995). The power of decision making has been decentralized as a means to arouse local enthusiasm. At the same time, the scope and scale of the state sector under central planning have been gradually reduced to make room for the growth of the private sector and operation of free market forces. The transition of the Chinese political economy from central authoritarianism to local corporatism and from plan to market means that the nature of cities as both administrative and economic entity will undergo profound transformation⁴. Greater role will have to be played by natural and free market forces in the growth and distribution of cities. Even when administrative changes are to be made by the state, they will have to be made in response to the operation of natural and free market forces. To better understand the growth dynamic of the Chinese cities in the new era of market reforms and globalization, it is necessary to analyze the natural growth of cities without the distortion or “noise” of arbitrary administrative changes such as designation of new cities and elimination of the existing ones. Based on detailed statistical data gathered in China’s first urban statistical yearbook published in 1985 and the one published recently (CSSB, 1985; CSSB, 1997), Table 3 analyzes the expansion of the same 295 cities in the time span of 1984-96.

⁴ The concept of local corporatism was popularized by Jean Oi who highlighted the corporational role played by local governments in the massive upsurge of China’s rural industry since the reforms. See Oi, 1995, pp. 1132.

Table 3 Structural and Spatial Change of Chinese Cities, 1984-96 (%)

City Size	Non-agricultural Population in City Proper		Built-up Area in City Proper	
	1984	1996	1984	1996
(Non-agricultural Population in City Proper)				
Extra-Large (>1 million)	39.42	35.69	30.85	27.83
Large (0.5 - 1 million)	21.00	20.10	21.94	20.27
Medium (0.2 - 0.5 million)	23.12	23.38	25.12	25.92
Small (<0.2 million)	16.46	20.83	22.09	25.98
Region				
East	49.57	49.70	44.82	46.99
Central	34.76	35.19	39.48	37.91
West	15.67	15.11	15.70	15.10
Total	100.00	100.00	100.00	100.00

Sources: 1. China State Statistical Bureau, 1985. *China's Urban Statistical Yearbook (1985)* Beijing: New World Publisher, pp. 35-50.
 2. China State Statistical Bureau, Team of Urban Social and Economic Survey, 1997. *China's Urban Statistical Yearbook (1997)* Beijing: China Statistical Press, pp. 51-90.

Two important indicators were used to assess the natural expansion of cities, including non-agricultural population and built-up area, both in the city proper. Among the 295 cities existing in 1984, more than half of the population and land area remained in large and extra-large cities. Small cities only accounted for 20 to 25 percent despite their larger number. Geographically, cities in the eastern coast accounted for 45-49 percent of the population and land area of the 295 cities. Over the twelve years of 1984-96, these 295 cities experienced a considerable structural change characterized by the proportional increase of small cities and relatively decline of large and extra-large cities in terms of both non-agricultural population and built-up area in city proper (Table 3). The extent of spatial change in non-agricultural population was limited although the built-up area of the cities in the eastern coast demonstrated significant expansion which appeared to be a logical spatial outcome of massive infrastructure development there in order to attract foreign investment. Altogether, the expansion of the 295 cities existing in 1984 in the twelve years of 1984-96 was characterized by a proportional decline of large and extra-large cities, structural increase of small cities, and a strengthened dominance of cities in the advanced eastern coast. This pattern is consistent with the one revealed in the above section. Taking together, the results of analysis in this and the above section suggest that both the designation of new cities and expansion of existing ones since the reforms have occurred primarily in the small city category and in the eastern coast.

The analysis of Chinese cities thus far has concentrated on the structural and spatial changes of the urban population and built-up area. How about the urban economy? What have been the changing roles played by cities as economic centers of investment and production? A series of historically comparable economic data for the same cities recently published by the Chinese urban statistical authorities

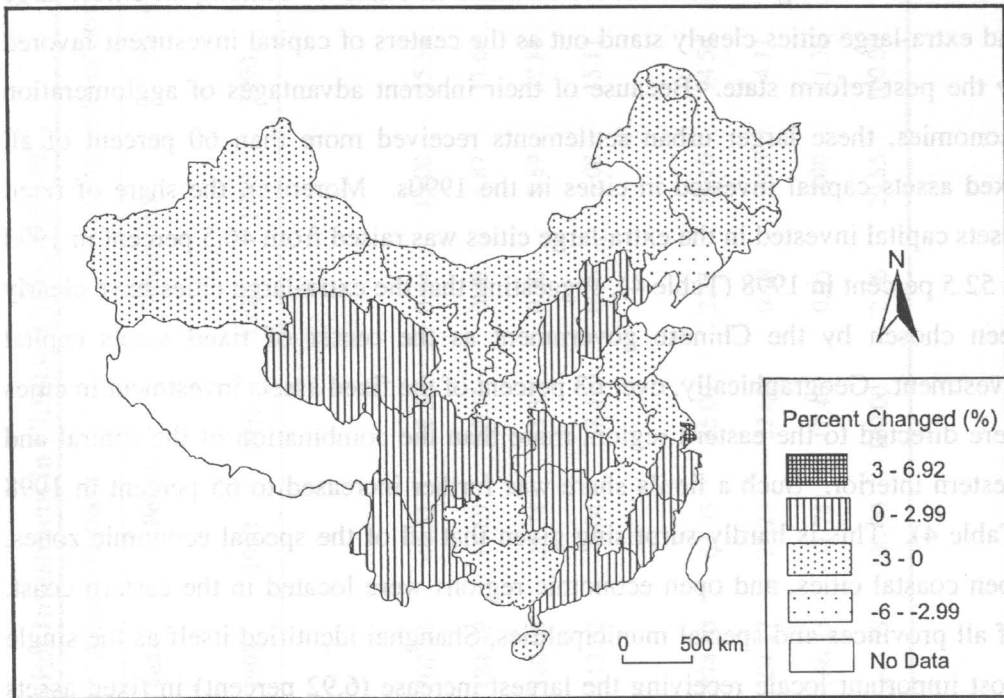
made it possible for a systematic assessment (CSSB, 1999). Tables 4 and 5 analyze the economic expansion of 220 cities existing in 1990 in three areas: fixed assets investment, utilized foreign investment, and gross domestic products. The picture unfolded clearly underscores the growing importance of larger cities, which is significantly different from the pattern identified in the above analysis of urban population and built-up area.

Table 4 Domestic and Foreign Investment in Chinese Cities, 1990-98

City Size	Fixed Assets Investment				Utilized Foreign Investment			
	Billion Yuan		Percent		Billion US\$		Percent	
	1990	1998	1990	1998	1990	1998	1990	1998
(Non-agricultural Population in City Proper)								
Extra-Large (>1 million)	86.81	707.23	46.53	52.56	0.84	13.00	35.34	43.56
Large (0.5 - 1 million)	31.14	184.49	16.69	13.71	0.28	4.87	11.68	16.33
Medium (0.2 - 0.5 million)	53.61	340.65	28.74	25.32	0.90	8.89	37.88	29.79
Small (<0.2 million)	15.00	113.22	8.04	8.41	0.36	3.08	15.11	10.32
Region								
East	117.58	874.60	63.03	65.00	2.23	26.10	94.54	87.44
Central	47.07	304.17	25.23	22.60	0.10	2.85	4.11	9.55
West	21.90	166.81	11.74	12.40	0.03	0.90	1.35	3.00
Total	186.55	1345.58	100.00	100.00	2.36	29.85	100.00	100.00

Source: Same as Table 1, pp. 383-388 and 407-412.

The roles played by cities of different size and location as the centers of domestic and foreign investment are assessed in Table 4. Among all cities, large and extra-large cities clearly stand out as the centers of capital investment favored by the post-reform state. Because of their inherent advantages of agglomeration economies, these larger urban settlements received more than 60 percent of all fixed assets capital invested in cities in the 1990s. Moreover, the share of fixed assets capital invested in the extra-large cities was raised from 46.5 percent in 1990 to 52.5 percent in 1998 (Table 4), suggesting that the extra-large cities have clearly been chosen by the Chinese government as the center of fixed assets capital investment. Geographically, over 63 percent of the fixed assets investment in cities were directed to the eastern region, more than the combination of the central and western interior. Such a lion's share was further increased to 65 percent in 1998 (Table 4). This is hardly surprising given that all of the special economic zones, open coastal cities, and open economic regions were located in the eastern coast. Of all provinces and special municipalities, Shanghai identified itself as the single most important locale receiving the largest increase (6.92 percent) in fixed assets investment during the period of 1990-98 (Figure 6). Clearly, Shanghai has recently been selected by the Chinese government as a new growth center apart from Guangdong and Fujian for concentrated development. Other locales that displayed a slight increase of fixed assets investment in the urban economy for the same period included provinces in the southeastern coast, the Beijing-Tianjin metropolitan region, and the southwestern interior (Figure 6).



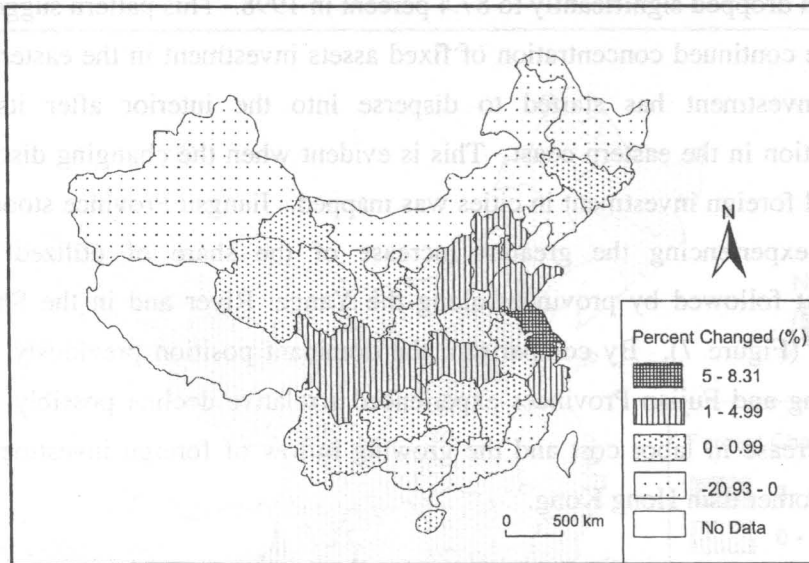
Source: China State Statistical Bureau, Team of Urban Social and Economic Survey, 1999. *New China's Cities Fifty Years* Beijing: Xinhua Press, pp.383-388.

Figure 6 Redistribution of Fixed Assets Investment in Chinese Cities, 1990-98

In a manner similar to the distribution of fixed assets investment, utilized foreign investment displayed a tendency in favor of large and extra-large cities whose share of the total investment enjoyed a substantial growth at the expense of other smaller cities during the 1990s (Table 4). The spatial distribution of utilized foreign investment has been somewhat different from that of fixed assets investment, however. Although an overwhelming proportion of utilized foreign

investment (94.5 percent) was located in the cities of the eastern coast, this proportion dropped significantly to 87.4 percent in 1998. This pattern suggests that, unlike the continued concentration of fixed assets investment in the eastern coast, foreign investment has started to disperse into the interior after its initial concentration in the eastern coast. This is evident when the changing distribution of utilized foreign investment in cities was mapped. Jiangsu Province stood out as the one experiencing the greatest increase of the share of utilized foreign investment followed by provinces along the Yangzi River and in the Shandong Peninsula (Figure 7). By comparison, the dominant position previously held by Guangdong and Fujian Provinces experienced a relative decline possibly because of the increase in labor cost and the growing inflow of foreign investment from countries other than Hong Kong.⁵

⁵ It has been well documented that investment from Hong Kong tended to be concentrated in Guangdong Province because of geographic proximity and cultural affinity. See Smart and Smart, 1991, Leung, 1993, Lin, 1997a, and Hsing, 1998. The growing importance of non-Hong Kong investment will naturally give rise to the decline of the dominant position held by Guangdong.



Source: China State Statistical Bureau, Team of Urban Social and Economic Survey, 1999. *New China's Cities Fifty Years* Beijing: Xinhua Press, pp.407-412.

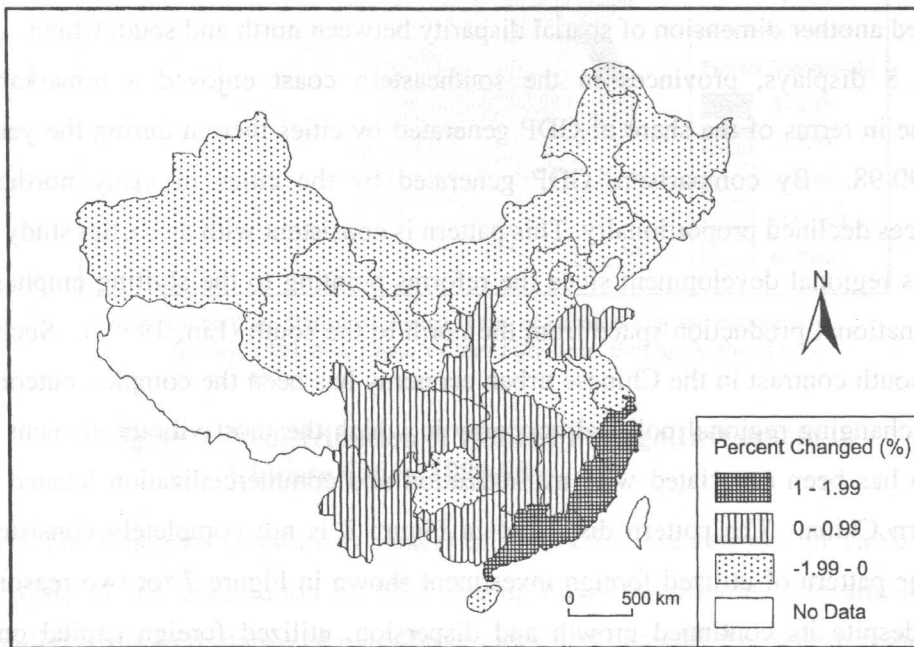
Figure 7 Redistribution of Utilized Foreign Investment in Chinese Cities, 1990-98

The functions of cities as centers of production are assessed in Table 5. An analysis of the distribution of GDP among cities of different size and location highlights the importance of extra-large cities and cities in the eastern region. Of the total amount of GDP generated by Chinese cities, over 62 percent was contributed by large and extra-large cities. A comparison of GDP on a comparable per capita basis among the cities of different size also underscores the importance of large and extra-large cities (Table 5). The economic disparity among cities of different regions was even more striking. As listed in Table 5, cities in the eastern region held an overwhelming majority (64 percent) of the total GDP generated by

the Chinese urban economy, more than the combination of those in the central and western interior. As for GDP per capita, cities in the eastern region were also well above their counterparts in other regions (Table 5). The tendency of spatial change over time has not been significant except a slight increase of the share of GDP held by the cities in the eastern region and a widened gap between the cities in the eastern coast and those in the interior in terms of GDP per capita. A closer analysis of the spatial redistribution of GDP among the cities of different provinces has unveiled another dimension of spatial disparity between north and south China. As Figure 8 displays, provinces in the southeastern coast enjoyed a remarkable increase in terms of the share of GDP generated by cities therein during the years of 1990-98. By comparison, GDP generated by the cities in many northern provinces declined proportionally. This pattern is consistent with an earlier study of China's regional development since the reforms pointing to the shifting emphasis of the national production space from the north to the south (Lin, 1999a). Such a north-south contrast in the Chinese urban economy has been the complex outcome of the changing regional political economy in which the most vibrant element of growth has been associated with marketization and commercialization located in southern China. The pattern displayed in Figure 8 is not completely consistent with the pattern of utilized foreign investment shown in Figure 7 for two reasons. First, despite its continued growth and dispersion, utilized foreign capital only accounted for only a small proportion of China's capital formation and is therefore not the decisive force shaping the geography of China's urban economy.⁶ Second, there is a time lag between capital investment and generation of GDP. The upward

⁶ A recent study of China's capital formation has revealed that utilized foreign capital investment only accounted for less than 20 percent of China's capital formation. See Lin, 2000, pp. 462; Even for the province of Guangdong, it has been estimated that foreign capital only accounted for about a quarter of its total construction capital investment in 1995. See Lin, 1999a, pp. 682.

movement of the urban economy in the southeastern regions in the 1990s may well be the result of earlier concentrated investment of capital both domestically and from foreign sources. This pattern further illustrates the complexity of China's urban economy the growth and distribution of which are not accountable by one single and quantifiable factor.



Source: China State Statistical Bureau, Team of Urban Social and Economic Survey, 1999.
New China's Cities Fifty Years Beijing: Xinhua Press, pp.323-328.

Figure 8 Redistribution of GDP Among Chinese Cities, 1990-98

Table 5 GDP Generated by Chinese Cities, 1990-98

City Size	GDP (Billion Yuan)		Structure (%)		Per Capita GDP (Yuan)	
	1990	1998	1990	1998	1990	1998
(Non-agricultural Population in City Proper						
Extra-Large (>1 million)	344.14	1730.14	48.45	48.11	4403.61	16922.58
Large (0.5 - 1 million)	113.28	512.19	15.95	14.24	3925.57	15323.32
Medium(0.2-0.5million)	188.11	1005.17	26.49	27.95	2924.13	13252.92
Small (<0.2 million)	64.70	348.83	9.11	9.70	2072.29	9336.64
Region						
East	442.58	2314.84	62.32	64.37	4182.58	18731.93
Central	180.55	848.67	25.42	23.60	2874.95	10477.50
West	87.10	432.72	12.26	12.03	2566.17	9770.53
Total	710.23	3596.22	100.00	100.00	3506.31	14450.54

Source: Same as Table 1, pp. 323-328.

IV. SUMMARY AND DISCUSSION

The on-going transition of the Chinese economy from plan to market has greatly speeded up the pace of urbanization. Because of the enormous population size involved, China's accelerated urbanization in the new century and indeed the new millennium will have significant implications for food security, environmental sustainability, and social stability of the nation and the globalizing world. Important questions have been raised concerning how China's hundreds of millions of rural exodus should be accommodated and what correct model of urbanization should be adopted by the Chinese planners and policy makers. Three competing paradigms have been suggested in the existing literature, including urbanization from above, urbanization from below, and metropolitanism. The formulation or selection of effective policy options must be, however, rested upon a thorough understanding of the dynamics of urban transition in different political and economic contexts.

This study examines structural and spatial changes of Chinese cities over the past five decades. Detailed analyses of the urban statistical data recently made available by the Chinese authorities for the period of 1949-98 have clearly identified two major phases of urban development before and after major institutional changes were made in 1978. In the Mao's era, large and super-large cities were developed as the key notes of the centrally planned economy, bases of socialist industrialization, and centers to maintain social stability and national integrity. The imperative of optimum industrialization, particularly the need to minimize the cost of urban service provision, had led the Maoist regime to retain the surplus rural labor force in the countryside and block the upgrading of rural settlements into cities. Despite the rhetoric of limiting the growth of large cities

and promoting the development of smaller ones, large and extra-large cities had dominated the urban hierarchy established by the Maoist regime. The strategic consideration of national defense, coupled with the interests in natural resource exploitation, had motivated the Maoist regime to promote urban development in the central and western interior at the expense of the eastern coast.

The demise of the Maoist regime in the late-1970s has ushered in a new political economy in which central authoritarianism gives way to local corporatism and greater room is made for market forces to play. A large number of towns have finally upgraded themselves into the small city category as a consequence of both rural transformative development from below and relaxed state control over city designation from above.⁷ The dominance of large and super-large cities in China's urban hierarchy has been significantly reduced because of the emergence of numerous small cities to take up a growing share of the urban settlements and population. The reorientation of the development strategy toward the eastern coast has re-consolidated the dominance of the eastern coast in China's urban development. Although small cities have played a growing role in the absorption of population and land development, large cities have remained the most efficient and productive economic centers for capital investment and production.

What, then, are the implications of this empirical study for our theoretical understanding of and policy making for China's urban transition? At least three important points can be made. First, urban development in China over the past five decades has clearly been a direct outcome of state articulation. The importance of

⁷ The concept of "transformative development" was introduced by Philip Huang to refer to the phenomenal growth of the rural economy characterized by not only the dramatic expansion of total agricultural output but also the substantial improvement in labour productivity and per capita income since the 1978 economic reforms. See Huang, 1990, pp. 17-18.

government policies, socialist institutions, and the urban administrative system in China's urban development and urbanization has been extensively documented (Ma and Cui, 1987; Lo, 1987; Pannell, 1990; Hsu, 1994; Fan, 1999; Wu, 2000; T. Zhang, 2000). However, the nature of such state articulation remains controversial and vague. A better picture has recently been unfolding itself with the continued release of systematic data in a longer time span. As this study has unveiled, structural and spatial changes of the Chinese cities over the past five decades have been shaped by the re-articulation of the socialist state whose functions were shifted from being interventional to regulatory. The peculiar system of cities under Mao in which large and extra-large cities enjoyed expansion at the cost of smaller cities was clearly the creation of a high-handed socialist state concerned over urban manageability and national security. In contrast, the explosive growth of numerous small cities since the 1978 reforms has been made possible primarily by the relaxation of state control over local economic development rather than any increased intervention or direct involvement of the central government. If the current trend of state re-articulation or reconfiguration of the state apparatus continues, then China's urban development will become increasingly dependent upon such divergent forces as local state corporatism, market economy, and globalization. From the standpoint of planning and policy making, future urban development and urbanization in China will have to count on the concerted efforts of not only the central state but also local entrepreneurial governments and foreign investors as well.

Second, the system of cities as it stands in China today is a complex result of changing political and economic forces in different historical contexts. In the Mao's era, the creation of a centrally planned economy integrated vertically and in a top-down manner had given rise to the dominance of large and super-large cities

in the urban hierarchy. This unbalanced system of cities polarized toward large and super-large cities has since the reforms been superimposed by a large number of newly emerged small cities subsequent to rural transformative development from below. The result of superposition has been a new dual-track system of cities characterized by the co-existence of large and extra-large cities on the one end and small cities and towns on the other. This dual-track system integrates the legacy of earlier Maoist state socialism with the growing elements of market economy and globalization. Given China's enormous population size and the transitional nature of its political economy, it is foreseeable that both large and small urban settlements will continue to grow simultaneously leading to a distinct Chinese pattern of dual-track urbanization. In view of the complex nature of China's urban transition, the three competing paradigms of urbanization from above, urbanization from below, and metropolitanism appeared to be the models based on different elements of the ongoing processes of Chinese urbanization.

Finally, this study raises an intriguing issue concerning the multiple functions of cities as centers of economic development and population concentration. The results of data analysis in this study have shown that large and extra-large cities remain the centers of capital investment and production although small cities have taken up a growing share of the urban population. This pattern is distinct from the norm in many market economies of the west where the concentration of economic activities and population often go together (Timberlake, 1985; Ingram, 1998; Lin, 2001b). The reasons for the Chinese deviant case are complex, including the relaxation of state control over the growth of small cities, high living expenses in large cities that discouraged the rural exodus, improved transport infrastructure in the metropolitan region, and the inflow of Hong Kong and Taiwanese investment which tended to be based more on pre-existing personal connections than on

agglomeration economies (Smart and Smart, 1991; Leung, 1993; Lin, 1999b; Hsing, 1998). Given the accession of China into the World Trade Organization, it is foreseeable that the flow of multinationals into China's large cities will create considerable employment opportunities and therefore increase the attractiveness of China's large cities to the rural migrants. Moreover, the continuing transition of the Chinese economy from plan to market will make greater room for free market forces to play. It is therefore highly questionable whether the division of labor between large and small cities in production activities and population absorption can last to sustain the intrusion of global market forces. The pressing task for Chinese planners now and in the near future will be to make a systematic assessment of the roles that should be and could be played by settlements of different sizes and locations in terms of economic development and urbanization. Special attention will have to be paid to the growth of large and extra-large cities in the era of globalization. Only when the growth of the system of cities and towns is well understood and planned can the urbanization of the largest developing nation be accomplished in an economically viable, socially stable, and environmentally sustainable manner.

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