

**EDUTUS UNIVERSITY**

**TDK THESIS**

BA in Administration and Management

LISIJIA

October 2023.

**EDUTUS UNIVERSITY**

**Chinese City-Tier Ranking Scheme: Spatial Contexts of Innovations  
and Lessons Learnt from Them**

**A kínai városok rangsor rendszere: Az innovációk térbeli  
összefüggései és ezek tanulságai**

Author: Li Sijia

Tutor: Dr. Zoltan Peredy

Manuscript closing: November , 2023.

Approved by tutor:



## **Abstract**

This TDK thesis explores the spatial background of the development and innovation of China's urban development ranking scheme. With China's unprecedented rapid economic and social development and urbanization process, urban ranking schemes have become a key tool for formulating policy resource allocation and economic strategic planning. My research work delves into the spatial background behind China's urban development ranking scheme, analyzes the innovative elements, and summarizes experiences and lessons learned, and at the same time providing experience and suggestions for future urban development and strategies.

## **LIST OF FIGURES AND TABLES**

Table 1: China's City-Tier Classification by GDP, Political Administration and Population

Annex 1. Open Cities in China since 1979

Annex 2. Population of the Chinese cities (million inhabitants, 2010)

## Content

<b>Abstract</b> .....	1
<b>LIST OF FIGURES AND TABLES</b> .....	2
<b>Introduction</b> .....	4
<b>1. Historical Background of China's Urban Ranking Scheme</b> .....	5
<b>1.1. Early urban division</b> .....	5
<b>1.2 Adjustment after reform and opening up</b> .....	6
<b>1.3. New Challenges and Strategies in the 21st Century</b> .....	9
<b>2. The spatial background of innovation</b> .....	11
<b>2.1. Geographical distribution and resource allocation</b> .....	11
<b>2.2. The relationship between population mobility and economic development</b> .....	12
<b>2.3. Technological Progress and Urban Space Reconstruction</b> .....	14
<b>3.2. Discussion of research outputs and their possible impacts</b> .....	17
<b>3.3. Recommendations for Policy and Practice</b> .....	18
<b>3.4. Looking at China's Innovation Practice from a Global Perspective</b> .....	19
<b>Summary</b> .....	21
<b>References</b> .....	22
<b>Annexes</b> .....	24

## **Introduction**

China, as the world's largest developing country, has experienced rapid urbanization in recent decades and has undergone significant changes in a short period of time. At the same time, in order to effectively manage and plan these growing cities, the Chinese government and academia are searching for effective evaluation and classification mechanisms, resulting in the birth of a city ranking scheme.

The ranking scheme is not only related to the recognition and positioning of the city, but also directly affects the allocation of resources, such as capital investments, technology, and talent. Treating and utilizing this tool correctly is crucial for the long-term development of a city (Zeping 2022).

In view of this, this study aims to deeply explore the spatial background behind China's urban ranking scheme, as well as the innovative points brought by this scheme. More importantly, I hope to present the experience and lessons contained in this plan to readers through this research.

My TDK thesis primarily focuses on the following crucial questions: What is the background of the formation of China's urban ranking scheme? What innovative elements have been introduced in this plan? What positive impacts have these innovations brought in practical applications, and what potential shortcomings are there?

This TDK thesis will first introduce the historical background and development process of the ranking scheme; Secondly, delve into the spatial background and innovative elements behind this plan; Then, summarize their experiences and lessons learned; Finally, provide conclusions and suggestions.

I hope this study can provide readers with a comprehensive understanding of China's urban ranking scheme, as well as valuable references for urban development in other countries and regions.

# 1. Historical Background of China's Urban Ranking Scheme

## 1.1. Early urban division

### *Preliminary Urbanization and Urban Division (1949-1978)*

At the beginning of the establishment of the People's Republic of China, the process of urbanization was relatively slow. The division of cities is mainly based on administrative level, geographical location, and economic importance. At this stage, the core of urban hierarchy is mainly administrative functions and geographical location (Gu et al. 2012; Zeping 2022).

### *Reforms and Opening up and the Reconstruction of Urban Hierarchy (1978-2000)*

The reform and opening up that began in 1978 has driven China's rapid economic growth. With the influx of foreign investment, especially in coastal areas, cities have begun to develop rapidly. During this period, many new cities and special economic zones emerged. City ranking has begun to consider more economic development, population size, and infrastructure construction (Gu et al. 2012; Zeping 2022).

### *New urban strategies and adjustments in the early 21st century (2000 present)*

Entering the 21st century, China's urbanization process reached a new stage. With the continuous growth of the economy, the urbanization rate is rapidly increasing. The government has begun to emphasize the "new urbanization" strategy, emphasizing urban quality and sustainability. Factors such as environmental protection, cultural heritage, technological innovation, and public services are considered at the city level. In addition, the government has also given more support and attention to urban development in the central and western regions.

Overall, from simple administrative and geographical division to complex comprehensive evaluation, the historical background of China's urban ranking scheme reflects the development and transformation of China's urbanization process, as well as the adjustment and evolution of government strategies and concepts for urban

development. The Chinese urban system indicated dynamic evolutionary trends but is influenced by the administrative system, which defines the powers of cities. The Chinese urbanization is can be described by the development of huge megalopolises and the strong growth of small and medium cities. This can be partly related to the political decentralization that gave to cities, the role of “modernization engine.” The evolution of the administrative system and economic specialization also reshaping the urban development (Gu et al. 2012; Liao, Swert 2018; Zeping 2022).

## **1.2 Adjustment after reform and opening up**

In 1978, China began its reform and opening up policy, marking an important period of transition from a planned economy to a market economy. During this period, urbanization, the construction of special economic zones, the introduction of foreign investment, and large-scale infrastructure construction were all rapidly promoted (Gu et al. 2012).

In the early stages of reform and opening up, especially coastal cities such as Shenzhen, Zhuhai, Xiamen, and Shantou were selected as special economic zones (SEZ), attracting a large amount of foreign investment and technology, thereby promoting the rapid development of these cities. With the construction of foreign-funded enterprises in these areas, the increase in job opportunities has attracted a large number of rural labor to enter cities, which has led to a sharp increase in urban population. According to early success of the SEZs had been confirmed, clearly demonstrating China’s efforts to overcome poverty and underdevelopment, China resolved to open its economy further, by extending similar favorable policies to 14 “coastal open cities” (Yue et al. 2009; Han, Wang 2013). In the Annex 1, you can see the detailed map of these cities.

In this context, the traditional urban hierarchical division appears to be not scientific and precise enough, as many emerging cities have developed rapidly, far surpassing other traditional large cities. The government and academia have begun to reconsider the criteria for dividing urban levels, paying more attention to new indicators such as



economic development level, infrastructure, and foreign investment introduction (Zeping 2022).

At the same time, in addition to special economic zones, cities in other regions have also begun to implement open policies to promote foreign trade and attract foreign investment. This has led to rapid urbanization in many inland and western cities.

Overall, after the reform and opening up, China's urban ranking scheme has undergone significant adjustments and updates, focusing more on actual economic and social development situations, rather than just traditional administrative levels or geographical locations.

Now, The Chinese City-Tier System is a classification of the 613 cities that categorize into 4 different tiers (with “1” being the highest and “4” the lowest) according to different factors such as GDP, income level, administrative level, and population. is not static, a city may move up or down in the rankings as its development changes over time (Casagrande 2022; Wong 2019).

The Chinese city tier system is a framework that was created to categorize cities in China. The system is useful for businesses and organizations when making decisions about investment, expansion, and marketing. The tiers are determined by several factors, including economic development, infrastructure, amenities, and population size.

China’ s city-tier classification is popularly used by businesses to guide their market entry strategy. China Briefing explores the criteria defining the respective city-tiers and their utility to determine whether the system is an effective and relevant tool for investors.

- Tier 1 cities – the most developed and desirable locations for foreign investors
- Tier 2 cities – still attractive investment destinations, with lower costs and opportunities for growth
- Tier 3 and 4 cities – less developed, but with potential for future growth

Consequently, the city-tier classification system offers foreign investors a practical tool to navigate the 613 (officially recorded) cities that make up China. Businesses use the tier categorization to track city development, market trends, and tax policies and incentives, among other things.

The city-tier classification system offers foreign investors a practical tool to navigate the 613 (officially recorded) cities that make up China. Businesses use the tier categorization to track city development, market trends, and tax policies and incentives, among other things.

Table 1. China’s City-Tier Classification by GDP, Political Administration, Population

City-tier classification	Tier 1.	Tier 2.	Tier 3.	Tier 4.
GDP	Over 300 billion USD	68-299 billion USD	18-67 billion USD	below 17 billion USD
Political administration of the city	Directly controlled municipalities and leading provincial capital cities	Directly controlled municipalities and economically important cities	Provincial capital cities and prefecture level cities	Prefecture-level cities and county level cities
Population	Over 15 million people	3-15 million people	1.5 to 3 million people	Less than 1.5 million people
Examples	Beijing Shanghai Shenzhen Guangzhou	Chengdu Dalian Hangzhou Ningbo Wuhan	Dongguan Guilin Lanzhou Lhasa Nantong	Changshu Linhai Taixing

Source: Own edition based on (Casagrande 2022; Wong 2019).

### **1.3. New Challenges and Strategies in the 21st Century**

In the 21st century, China's urbanization process has entered a more complex and diverse stage. The trend of globalization, the rapid development of technology, the urgency of environmental protection, and the pursuit of higher quality of life by people have brought new challenges and opportunities to urban development (Chen et al. 2016; Han, Wang 2013; Mason 2017).

#### *New challenges*

Environmental and sustainability issues: With the deepening of industrialization and urbanization, environmental pollution and excessive resource consumption have become increasingly serious problems. How to maintain economic growth while ensuring environmental sustainability and ecological balance has become a huge challenge.

Overconcentration of urban population: Large cities, especially first tier cities, face serious problems of population overconcentration. This has led to problems such as traffic congestion, rising housing prices, and increased pressure on public services.

Technological Revolution and Industrial Structure Adjustment: With the development of new technologies such as artificial intelligence, big data, and the Internet of Things, traditional industries and employment structures are facing pressure to adjust and transform.

#### *New strategy:*

New urbanization: Emphasizing people-oriented and focusing on improving the quality of urbanization, rather than just quantity. Encourage rural residents to settle down in cities and enjoy equal public services.

Industrial upgrading and innovation driven: Encourage cities to develop towards higher end, green, and intelligent directions, strengthen research and innovation, and promote the optimization and upgrading of industrial structure.

Regional coordinated development: Encourage cooperation and complementarity between regions, weaken administrative boundaries, form urban agglomerations and metropolitan areas, and jointly promote economic and social development.

Green development and ecological civilization construction: Fully consider environmental factors in urban planning and construction, promote green buildings, encourage energy conservation and emission reduction, and protect the ecological environment.

Overall, Chinese cities in the 21st century are facing unprecedented opportunities and challenges. Adapting to these changes, formulating reasonable strategies, and ensuring the healthy, sustainable, and harmonious development of cities are the shared responsibility of all governments and decision-makers.

You can see the population of the Chinese cities (million inhabitants, 2010) in the Annex 2.

## **2. The spatial background of innovation**

### **2.1. Geographical distribution and resource allocation**

In general, there can be positive matching relationship between innovation agglomeration and a city's position in the urban tier system (Fan et al. 2021).

#### *Geographical distribution*

Geographic location plays a crucial role in innovation. Throughout history, most technological and cultural innovations have emerged and spread within specific geographical regions.

Urban agglomeration effect: Large cities and urban areas, due to their high-density population and industries, tend to form clusters of knowledge and technology, thereby promoting innovation. For example, places such as Silicon Valley and Shenzhen have become centers of global innovation due to their unique geographical and industrial environment (Statistics Times 2023).

Regional Culture and Tradition: Different geographical regions often have unique cultures and traditions, which also affect local innovation activities. For example, the Jiangsu Zhejiang Shanghai region in China has become a highland for modern manufacturing and innovation due to its traditional commercial and handicraft industries.

#### *Resource allocation*

Resource allocation is another key factor determining innovation activities and outcomes.

Capital investment: Capital is the foundation for promoting research and technological innovation. In some regions, a favorable innovative investment and financing environment has been formed due to government policies, venture capital, and industrial fund support.

Talent gathering: Talent is the key to innovation. High quality educational resources,

research institutions, and open talent policies can all attract and retain high-quality innovative talents.

**Industrial chain integrity:** A complete industrial chain can promote the rapid transformation and commercialization of technology. Some regions, due to their complete upstream and downstream industrial systems, can effectively promote the application of innovative achievements.

In short, the spatial background of innovation is the result of the comprehensive effect of multiple factors. Understanding and utilizing the key factors in these spatial backgrounds is of great significance for improving innovation efficiency and effectiveness (Li 2019).

Higher urban tier category means more intensive the human capital, more complete the service industry system, more frequent innovation activities, which makes significantly easier commercialization. The improvement of the urban tier is promoting and speed up innovation agglomeration. The innovation activities correlated with the urban tier, and the country should play the role of high-tier cities and promote the further investment of factors in high-tier cities (Fan et al. 2021).

## **2.2. The relationship between population mobility and economic development**

*Population mobility drives labor supply:*

When the population flows from rural or underdeveloped areas to urban or developed areas, it provides cities with abundant labor resources, which are the foundation of many modern industries and service industries.

*Promoting economic growth:*

A large amount of labor migration to cities can meet the demand for rapid industrialization, thereby promoting economic growth. For example, China's economic miracle is partly attributed to the influx of rural labor into cities.

*Expand the consumer market:*

With the flow of population, the population of cities increases, the consumer market also expands accordingly. New immigrants have brought new consumer demand to cities, further promoting the development of their commercial and service industries.

*Talent flow and technological innovation:*

In addition to ordinary labor, the flow of talents with educational backgrounds and skills has also promoted technological innovation and economic development. For example, many countries' technology centers and innovation parks have attracted a large number of highly skilled talents both domestically and internationally.

*Impact on the original area:*

Population outflow may lead to a shortage of labor in primitive areas, affecting their economic development. On the other hand, immigrants often send some of their income back home, which can bring capital inflows to the original areas.

*Urbanization and Infrastructure Development:*

The urbanization process caused by population mobility requires cities to provide more infrastructure and services, such as housing, transportation, and public services. This demand also promotes economic development.

However, population mobility also brings some challenges, such as overcrowding in cities, environmental pollution, and social inequality. Therefore, guiding and managing population mobility reasonably to ensure sustainable economic and social development is an important task that governments around the world need to face.

There is a complex interactive relationship between population mobility and economic development. Properly guiding and managing population mobility can make it an important driving force for economic development (Maason 2017).

### **2.3. Technological Progress and Urban Space Reconstruction**

With the rapid progress of technology, the spatial layout and form of cities are undergoing unprecedented changes. The impact of technological progress on urban space is both profound and extensive, covering multiple aspects such as transportation, architecture, infrastructure, and social activities.

#### *Progress in transportation technology*

Modern transportation technologies, such as autonomous vehicle, maglev trains and unmanned aerial vehicles (UAV), are reshaping the city's transportation network. These technologies have reduced traffic congestion, improved travel efficiency, and brought more flexibility to urban planning.

#### *Intelligent buildings and green buildings*

Technological progress has made buildings more intelligent and environmentally friendly. Intelligent building systems can automatically adjust temperature, light, and ventilation to achieve maximum energy efficiency. At the same time, green building materials and design concepts have also brought sustainability and ecological friendliness to cities.

#### *Digital Technology and Urban Space*

Digitalization and internet technology have created new dimensions for urban space. Technologies such as virtual reality, augmented reality, and digital twins have enabled people to simulate and interact in digital space, thereby changing the way urban life is conducted.

#### *Reconstruction of Public Space*

With the popularization of mobile communication and social media, the function and significance of public spaces have changed. For example, traditional squares and parks may transform into wireless network hotspots and digital art exhibition spaces.



### *Ecological Technology and Urban Greening*

Ecological technologies, such as rainwater harvesting, green roofs, and vertical gardens, are changing the urban ecosystem. These technologies not only improve the ecological benefits of cities, but also provide livable and leisure spaces for citizens.

Technological progress is profoundly affecting and changing urban space. For urban planners and managers, understanding these changes and effectively applying new technologies is the key to future urban development.

### **3. Main research findings**

#### **3.1. Comparative analysis of successful and failed cases**

##### *Success Case: Shenzhen*

Shenzhen is a classic successful case since China's reform and opening up. From a small fishing village, it has rapidly developed into a global high-tech and innovation center. The following are several key factors for its success (Xia 2023).

**Policy support:** As China's first special economic zone, Shenzhen enjoys a lot of policy preferences and autonomy.

**Innovation driven:** Shenzhen has attracted numerous domestic and foreign high-tech enterprises, such as Huawei and Tencent, becoming China's "Silicon Valley".

**Geographic location:** Adjacent to Hong Kong, Shenzhen has become the main communication window between China and the international market.

##### *Failure Case: Northeast Old Industrial Base*

Compared to the success of Shenzhen, some old industrial cities in Northeast China have faced significant challenges in the past few decades. Former industrial towns such as Shenyang and Dalian are now facing problems such as industrial decline and population loss (Yang 2019).

**Industrial structure:** overly reliant on traditional heavy industry, lacking industrial diversity and innovation capabilities.

**Management mode:** In the era of planned economy, the economic management methods of these cities were relatively rigid, lacking market mechanisms and competitiveness.

**Geographic location:** Compared to coastal cities in the southeast, the Northeast region is more remote and has lower levels of external communication and openness.

Different urban development strategies and environmental factors, such as policy support, geographical location, industrial structure, and management models, can have

a profound impact on urban development. The comparison between Shenzhen and the old industrial bases in Northeast China reminds us that when formulating and implementing urban development strategies, these complex internal and external factors must be taken into account to ensure the sustained and healthy development of the city.

### **3.2. Discussion of research outputs and their possible impacts**

#### *Research results*

The historical evolution of urban hierarchy: From the rapid rise of special economic zones and coastal cities in the 20th century to the new urbanization strategy in the 21st century, urban hierarchy ranking schemes are not only based on economic and administrative power, but also emphasize urban functions, technological innovation, and ecological sustainability.

The impact of technology on urban form: Modern technology, especially digital technology and transportation technology, is reshaping the spatial and functional aspects of cities. From intelligent buildings to the digitization of public spaces, technology has become the core driving force for urban development.

Public policy and strategic adjustments: The government's strategy for ranking cities is also constantly being adjusted to adapt to the rapidly changing economic and social environment. The current strategy places greater emphasis on the comprehensive functions, ecological balance, and quality of life of cities.

Future outlook: Considering the continuous progress of technology and the trend of globalization, China's urban ranking scheme will still face new challenges and opportunities. Flexible policies, technological innovation, and public participation will be key to future urban development.

The urban ranking scheme in China has transformed from a simple economic and administrative model to a comprehensive, diverse, and dynamic system, reflecting the

profound changes in China's urbanization process and new trends in global urban development.

*Possible contributions and impacts*

Systematic analysis: This study not only provides a comprehensive analysis of China's urban hierarchy system from a macro perspective, but also further explores how to integrate innovation and technological development into this system to ensure its sustainability and adaptability.

The connection between history and reality: Through a detailed analysis of past success and failure cases, we can understand the challenges and opportunities in current urban development and provide guidance for future urban strategies.

Integration of innovation and urban development: This study emphasizes the key role of innovation and technology in urban development, and proposes a series of specific strategies and suggestions to ensure that cities can fully utilize the opportunities brought about by technological progress.

Interdisciplinary research methods: This study adopts interdisciplinary research methods, combining urban planning, economics, sociology, and technological research, providing us with a comprehensive and in-depth perspective.

Reference for policy formulation: Through in-depth research on China's urban ranking scheme, policy makers can better understand its impact and limitations, thus formulating more effective and adaptable policies.

### **3.3. Recommendations for Policy and Practice**

*Strengthen diversified participation:*

Encourage different stakeholders, such as government, enterprises, academia, and the public, to jointly participate in the formulation of urban development strategies to ensure that the interests of all parties are balanced and reflected.

*Investing in education, research and development:*

In order to maintain and strengthen the innovation capacity of cities, it is crucial to continue investing in education and research and development. The government should cooperate with the private sector to ensure that resources are effectively used for the development of technology and talent.

*Emphasize sustainability:*

In urban planning and the design of innovative spaces, environmental protection and social justice should be the core principles. Sustainable urban strategies will help achieve long-term economic, social, and environmental goals.

*Encourage local experiments:*

The central government should provide more autonomy for local governments, allowing them to conduct experiments and innovations based on local conditions.

*Establish strong data and analysis capabilities:*

With the development of big data and artificial intelligence, the government should establish strong data collection and analysis capabilities to better understand the trends and challenges of urban development, and formulate strategies accordingly.

*Promoting international cooperation:*

Given the global nature of urbanization and innovation, China should strengthen cooperation with other countries, share experiences, learn best practices, and jointly address cross-border challenges such as climate change.

### **3.4. Looking at China's Innovation Practice from a Global Perspective**

In the context of globalization, China's urbanization process and city ranking scheme have attracted international attention. Its successful experiences, challenges, and lessons provide reference for global urbanization trends.

### *The Chinese model in global comparison*

The urban ranking scheme in China has its uniqueness. Compared to the urbanization process in the West, China places more emphasis on the coordination between the central and local governments, rather than simply being driven by market forces. This model ensures the orderliness and stability of urban development to a certain extent.

### *Global impact of innovation space*

China's efforts in technological innovation, industrial upgrading, and urban planning, such as the high-tech industrial parks in Shenzhen, have become global imitations. These innovative spaces not only provide a platform for technological and industrial development, but also promote the global flow of talent, capital, and information.

### *Learn from lessons learned*

Although China has made significant progress in urbanization and innovation space, it also faces some challenges, such as environmental pollution, social inequality, and resource constraints. These issues provide important lessons for global cities, namely that urbanization and innovation should be combined with sustainability and social justice.

### *Interaction between China and the World*

China's urbanization process and city ranking scheme can also be influenced by global factors such as international investment, global supply chain, and climate change. On the contrary, China's urban development strategy and innovation space have had a profound impact on the world, driving new trends in global urbanization and technological innovation.

From a global perspective, China's urban ranking scheme, innovation space, and lessons learned provide important references and insights for global urbanization and innovation. At the same time, global factors are also shaping and influencing China's urbanization path and innovation strategies.

## **Summary**

China needs to advocate mutually beneficial cooperation between cities, encourage exchanges between cities, promote the comprehensive development of all cities, and enable each city to showcase its own characteristics and values. Medium sized cities should avoid homogenization and superficial development, and cannot blindly replicate the style and features of well-known cities both domestically and internationally. They should delve into the fundamental path of urban transformation and development, while inheriting their own cultural heritage, reshaping their own characteristics and leveraging their own advantages. In terms of characteristic industries, we will focus on promoting the digital and intelligent transformation and upgrading of traditional industries, supporting the cultivation of new technologies and the clustering of future industrialization. We need to pay more attention and investment to ensure that every city can achieve balanced and sustainable development.

## References

### *Publications, Studies*

Chen M., Liu W., Lu D. (2016): Challenges and the way forward in China's new-type urbanization; *Land Use Policy*, Vol.55, pages 334-339, DOI: 10.1016/j.landusepol.2015.07.025

Fan F., Dai S., Zhang K., Ke H. (2021): Innovation agglomeration and urban hierarchy: evidence from Chinese cities; *Applied Economics*, 53(8):1-19; DOI: 10.1080/00036846.2021.1937507

Gu C., Wu L. and Cook I. (2012): Progress in research on Chinese urbanisation; *Frontiers of Architectural Research* 1(2): 101-149; DOI: 10.1016/j.foar.2012.02.013; Licence: CC BY-NC-ND 4.0

Han R., Wang L. (2013): Challenges and Opportunities Facing China's Urban Development in the New Era; *China Perspectives* 2:15-27; DOI: 10.4000/chinaperspectives.6149

Li Guan (2019): The relationship between urban level and economic development; *Urban Research*, 32 (3): 45-60

Liao L.; Swerts E. (2018): *The Chinese urban system: between multi-level political evolution and economic transition*; In book: International and Transnational Perspectives on Urban Systems; DOI: 10.1007/978-981-10-7799-9\_10

Wang, H. (2018): Urban ranking systems in China: *Urban Studies*, 55 (2), 399-420

Yue M. Y; Lee J. and Kee G. (2009): China's Special Economic Zones; *Eurasian Geography and Economics* 50(2): 222-240; DOI: 10.2747/1539-7216.50.2.222

Zhang Yapeng (2020): *Research on the Urbanization Process in China*; Beijing University Press

### *Internet sources*



Casagrande C. (2022): *Chinese City-Tier System: A Guide For Foreign Investors In 2023; FDI China*, available at <https://www.fdicchina.com/blog/chinese-city-tier-system-investment-guide/> (access on October 30, 2023).

Mason H. (2017). *Why Succeeding in China's Lower-tier Cities? Is So Important. China's 'new' first-tier cities compete to attract talent*; available at [chinaplus.cri.cn](http://chinaplus.cri.cn). (access on October 25, 2023).

Statistics Times (2023): *Population of Cities in China 2021.*, available at <https://statisticstimes.com/demographics/country/china-cities-population.php> (access on October 25, 2023).

Wong D. (2019): *China's City-Tier Classification: How Does it Work?*; China Briefing, available at <https://www.china-briefing.com/news/chinas-city-tier-classification-defined/> (access on October 31, 2023).

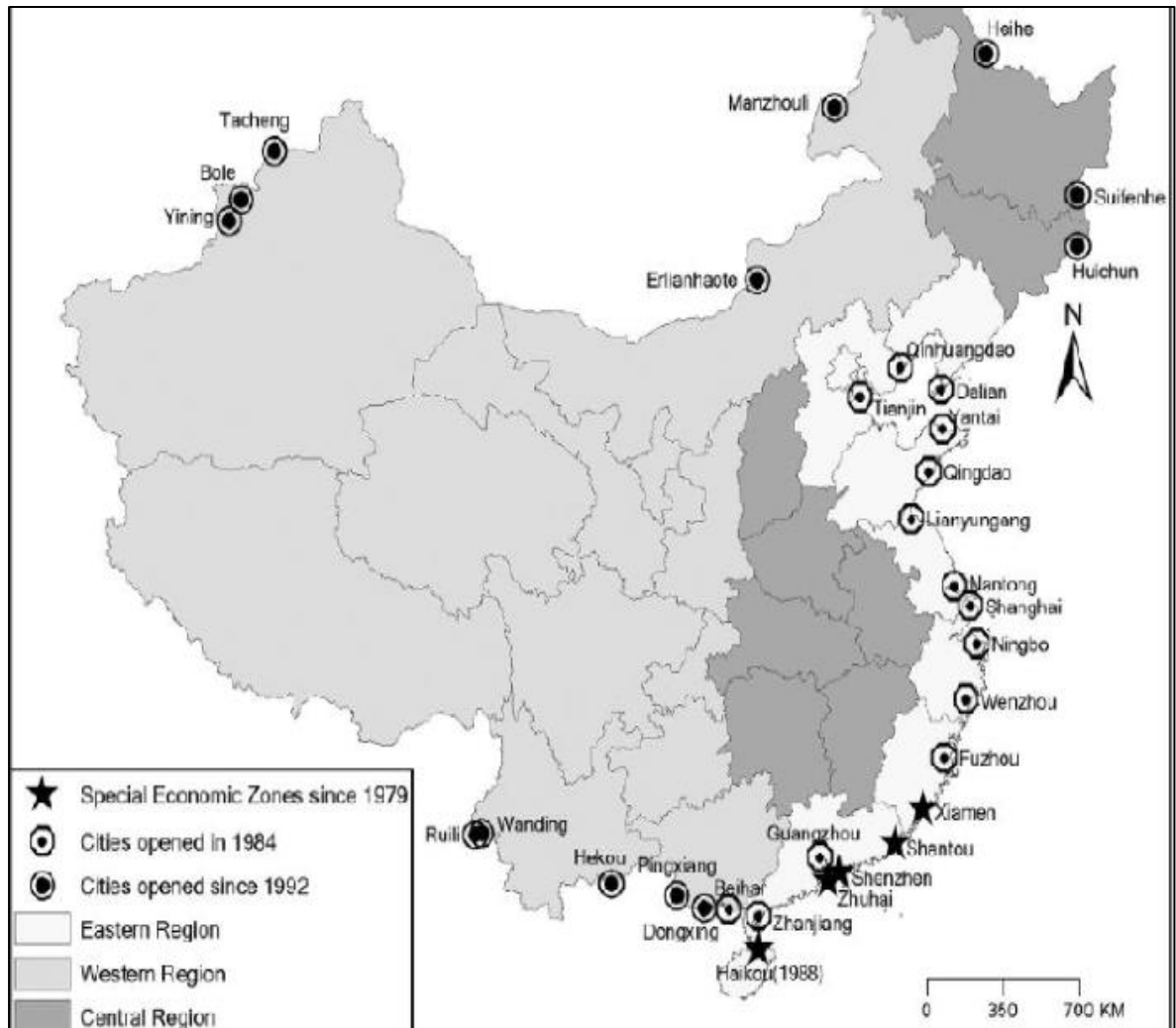
Xia J. (2023): *Shenzhen Special Economic Zone: There are so many special economic zones in China, why is Shenzhen the most successful?* available at <https://baijiahao.baidu.com/s?id=1765318648987516740&wfr=spider&for=pc>, (access on October 31, 2023).

Yang (2019): *The reasons beyond Shenzhen great successes*; available at <https://zhidao.baidu.com/question/270823649.html> (access on October 22, 2023).

Zeping R. (2022): *Ranking of Urban Development Potential in China*; available at <https://baijiahao.baidu.com/s?id=1742635566421321392&wfr=spider&for=pc> (access on November 02, 2023).D. (2019).

Annexes

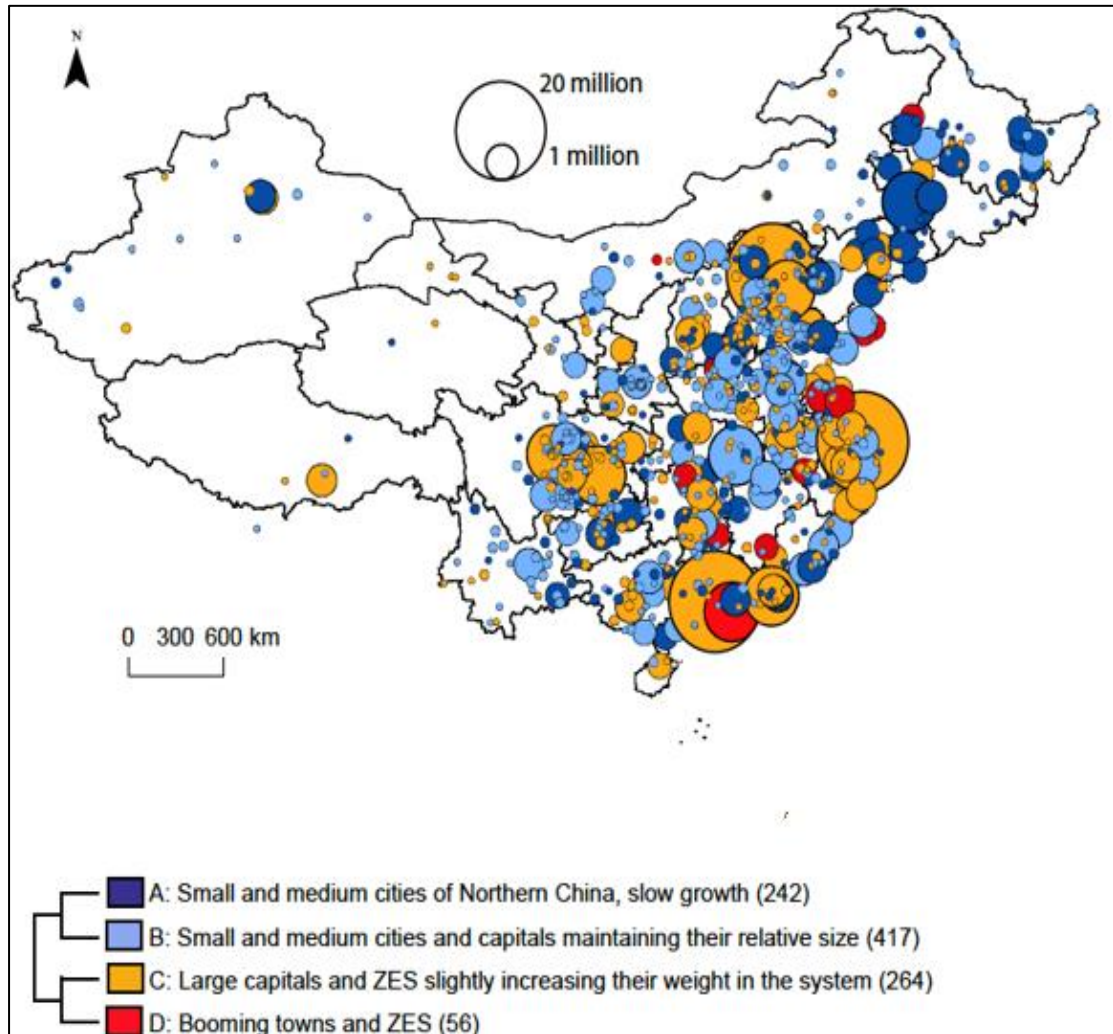
Annex 1. Open cities in China since 1979.



Source: Han, Wang (2013).

Annex 2.

Population of the Chinese cities (million inhabitants, 2010)



Source: Liao, Swerts (2018)