Research on the Development Path of High-quality Economy in Hefei Metropolitan Area

Youqun Wu, Miaomiao Li, Qifei Zhang, Xinlin Liao

School of Economics, Anhui University of Finance and Economics, Bengbu, China

Abstract

The metropolitan area is the key to the new urbanization in China.Based on the analysis of Hefei metropolitan area planning,this paper studies the spatial structure of the development of cities and counties in the metropolitan area,and reveals the characteristics and shortcomings of economic development in the Hefei metropolitan area.It also focuses on the radiation capacity of Hefei in the core city,the difference between urban and rural areas and the spatial structure of transportation.Finally,it proposes joint improvement development urban-rural integration,improvement of transportation space system,seizing opportunities, innovation and development,etc.,in order to promote the economy of Hefei metropolitan area high quality development.

Keywords

Hefei metropolitan area, High quality development, Spatial structure.

1. Development Status of Hefei Metropolitan Area

1.1. Spatial Scope of Hefei Metropolitan Area

The concept of provincial capital economic circle was first proposed at the Eighth Party Congress of Anhui Province in 2006.In 2016,it was officially upgraded to Hefei metropolitan circle,including seven cities including Hefei,Huainan,Lu'an,Chuzhou,Wuhu,Maanshan and Tongcheng.By the end of 2017,the GDP of Hefei metropolitan area has reached 1578199 billion yuan,accounting for 58.41% of the total GDP of Anhui Province;the total financial revenue of seven cities in the metropolitan area has reached 151.724 billion yuan,accounting for 53.95% of the total financial revenue of the province.Different cities have different geographical location,different city scale and different economic development,which makes the urbanization level of each city also have a gap.According to statistics,in 2017,Hefei's population urbanization rate reached 73.75%,which is the city with the highest level of urbanization in the whole metropolitan area, and the lowest is Lu'an City,only 45.41%,which is significantly lower than other cities.Table 1 selects three indicators of permanent population,GDP and fiscal revenue,and compares the total of these seven indicators with the indicators of the whole province.It can be seen that the development of Hefei metropolitan area plays an important role in the economic development of Anhui Province.

1.2. Current Spatial Structure of Hefei Metropolitan Area

By the end of 2018,11 expressways have been completed, including Hefei Ring Expressway, Hefei-Huainan-Bengbu expressway, etc.In addition, there are three expressways, namely Hefei-Nanjing, Hefei-Anqing and Wuhu-Hefei expressway, which are under construction, as well as other planned expressways. In addition to the existing high-speed rail and subway, as well as national and provincial roads, Hefei metropolitan area has initially formed a transportation space network with Hefei as the center and closely interwoven with roads, railways, aviation, etc. Table 2 shows the traffic development status of Hefei metropolitan area.

	in the provide the second seco	L .	
City	Permanent population (10000)	GDP (100 million yuan)	Financial revenue (100 million yuan)
Hefei	796.53	7003.05	655.90
Huainan	348.70	1060.18	101.32
Chuzhou	407.62	1604.39	182.51
Lu'an	480.03	1168.05	112.79
Maanshan	230.16	1710.09	138.36
Wuhu	369.62	2963.26	311.23
Tongcheng	67.90	272.97	15.14
Total	2700.56	15781.99	1,517.24
Whole province	6255.00	27018.00	2812.45
Proportion	43.17%	58.41%	53.95%

Table 1:Development status of Hefei metropolitan area in 2017

Table 2 : France development status of Helef metropolitan area			
Transportation	Development status		
Highway	Existing:HefeiRingExpressway,Hefei-Huainan-Fuyang Expressway,Chuzhou- Maanshan expressway,Maanshan-Chaohu expressway,Chaohu-Wuwei expressway, Lishui-Maanshan expressway,Nanjing-Wuhu expressway,Wuhu- Tongling expressway,Lishui-Wuhu expressway,Wuhu-Xuancheng expressway,Wuhu-Huangshan Expressway		
	Extending:Hefei-Nanjing Expressway,Hefei-Anqing expressway and Wuhu- Hefei Expressway		
	Planned: Expansion of Hefei Ring Expressway and construction of Wuhu Ring Expressway		
Railway	Existing:He-fu high speed railway(Beijing-Fuzhou high speed railway),Shanghai Hanrong high speed railway,Ningan high speed railway		
	Extending:Hefei-Anqing high speed railway,Hefei-Lianyungang high speed railway,Shangqiu-Hefei-Hangzhou high speed railway,Anhui-Jiangxi high speed railway		
	Planned: Chaohu-Maanshan high speed railway, Hefei-Maanshan-Shanghai high speed railway,Hefei-Chaohu-Wuhu-Xuancheng high speed railway		
Subway	Hefei:Line 1 and line 2 have been put into operation, and line 3,line 4 and line 5 have also been under construction.Line 3 is expected to be completed and open to traffic by the end of 2019		
	Wuhu:three lines have been started, and it is expected that line 1 will be completed and opened to traffic by the end of 2019,and the other two lines will be completed in succession		
Aviation	Existing:Hefei Xinqiao International Airport,Hefei Luogang airport,Wuhu sanyuantong Airport		
	Constructing: Wuhu-Xuancheng Airport		
Water Transport	Existing:Wuhu port,Hefei port and Maanshan port		

Table 2: Traffic development status of Hefei metropolitan area

However, compared with the Nanjing metropolitan area, the main traffic infrastructure of it has formed a seamless connection and built a highway network of "two rings, two horizontals and

twelve shots".However,the traffic development of Hefei metropolitan area started late,the traffic infrastructure construction is not perfect,and it is unable to realize the traffic interconnection with other fringe areas,which needs further development.

2. Problems Existing in the Development of Hefei Metropolitan Area

2.1. The Core Cities are Small in Scale and Lack of Radiation Capacity

As the core city of Hefei metropolitan area,Hefei has a total land area of 1,335 square kilometers.According to statistics,the GDP of Hefei reached 627.438 billion yuan in 2016,ranking the 22nd in China.However, in 2014,the GDP of Hefei was only 467.290 billion yuan,ranking the 31st in China.However,compared with the neighboring core cities in the metropolitan area,the gap is still large.For example,the GDP of Hangzhou during the same period was 1,105.05 billion yuan,ranking the 10th in China,far exceeding that of Hefei.In terms of urbanization and industrialization,there is still an obvious gap between Hefei and the surrounding metropolitan areas.And the inside of the Hefei city circle seven cities there are different problems,Hefei as other cities in the central city of metropolis circle radiation ability is weak,unable to play a leading role,how to further solve the problems in every city,promote the economic development of every city and coordinated development between cities,this will is a major challenge in the development of Hefei city circle.

2.2. Regional Development is Unbalanced and the Gap between Urban and Rural Areas is Relatively Large

According to the current statistics of Anhui statistical yearbook, it can be seen that the county economic development of Anhui needs to be strengthened in 2017. Taking Hefei as an example, the county economic aggregate of Hefei is 234.684 billion yuan, while the GDP of Hefei was 70305 billion yuan in 2017, accounting for only 33.51% of the whole city. The total GDP of Hefei metropolitan area reached 1578.199 billion yuan, while the total county economy of the whole metropolitan area was 648.339 billion yuan, accounting for 41.08 percent of the total metropolitan area mainly comes from the traditional industries, and basically does not involve some emerging industries. Because of the backward development level of the industrial structure of the county economy, the development level of the whole metropolitan area is still relatively backward despite the relatively high GDP ratio. In addition, there is still a big difference between urban and rural development. Traditional agriculture is mainly developed in rural areas, and new industries are rarely involved. The development between urban and rural areas is not coordinated and sufficient, resulting in a large gap between urban and rural areas.

2.3. Imperfect Transportation Facilities and Immature Transportation Development

The ministry of communications of Anhui province mentioned the construction of "Hefei metropolitan area" in its 13th five-year plan. It can be seen from the speed of railway industry development in recent years that transportation plays an important role in economic development. Although the urban transportation network of Hefei has been rapidly constructed, the development of the metropolitan area of Hefei starts late, the economic foundation is relatively weak, and the level of transportation infrastructure is still not perfect. This and the size of the city, and also the relative and absolute location on geographical location, there are some on the edge of the cities and counties in central city far distance, it is difficult to be the core city of radiation effect, lead to differences in economy, and the contact between central city traffic is not tight, Hefei to Maanshan, Wuhu and Tongcheng haven't

communication between high-speed rail,rail connectivity aspect also has the very big development space. However, the metropolitan area adjacent to Hefei metropolitan area has developed rapidly and made great progress in traffic, basically realizing traffic integration and establishing close traffic network structure space. For example, Hangzhou metropolitan area is connected with each other, forming a closely connected network system and taking the lead in entering a new era of integrated transportation. In contrast, the development of Hefei metropolitan area is not perfect, and the development of transportation is not mature.

3. High-quality Development Path of Hefei Metropolitan Area Economy

3.1. Make Proper Positioning and Strengthen the Economic Radiation Capacity of Core Cities

Make proper positioning and improve system planning and infrastructure construction. First of all, is a national industrial pilot city, Hefei has a government policy and funding support, the city circle economic development plays an important role, but, in order to develop economy of the whole city circle, it is necessary to give full play to the role of Hefei city as the core, take its radiation ability, promote the economic development of city circle area other six cities, dynamic transformation to promote the development of industrial clusters, industrial clusters competitiveness. We will foster and expand new industries and form a new pattern of integrated development.Secondly,reasonable planning should be carried out for each city in the metropolitan area of Hefei.Due to geographical reasons, specific functions should be divided for different cities to meet the different needs of each city.Reasonable planning for different cities can reduce the waste of urban resources and save resources. Finally, we should seize the historical opportunity of rising from central China, take this opportunity to further develop Hefei metropolitan area, improve the level of urbanization, give play to the agglomeration effect of metropolitan area, rationally allocate resources, promote industrial upgrading, and make Hefei metropolitan area develop into a high-quality metropolitan area.Improve the radiation capacity of Hefei as a core city, strengthen the close economic relationship between the seven cities in Hefei metropolitan area, and promote the high-quality economic development of Hefei metropolitan area.

3.2. Accelerate the Revitalization of Rural Areas and Promote the Integrated Development of Urban and Rural Areas

The active construction of rural areas and the realization of rural revitalization can effectively narrow the gap between urban and rural areas, improve the overall level of urbanization and promote the development of urban and rural integration. With the support and help of the government, we should build modern agriculture, jointly promote rural development, realize rural revitalization and narrow the gap between urban and rural areas. In order to realize rural revitalization, the concept of "city" and "township" must be weakened, which requires the synchronous construction of new urbanization and new rural areas. The government plays a key role in this process. According to the different geographical locations and resource conditions of different places, it is necessary to carry out characteristic development, promote the overall development of urban and rural areas, and strive for the development of urban and rural integration. In addition, it is necessary to gradually realize the integrated development of urban and rural markets and industries, so as to further improve the urbanization level of Hefei metropolitan area and promote the high-quality development of Hefei metropolitan area economy.

3.3. Improve the Traffic System and Build the Traffic Space Network

The government needs to introduce a series of policies to support the infrastructure construction of transportation facilities, carry out coordinated development among the seven

cities in the Hefei metropolitan area,build inter-city networks,transport nodes and hubs,improve the information management system,and finally build the Hefei metropolitan area into a high-speed rail,high-speed as the framework;The integrated transportation space network is made up of universal railway and trunk highway.Hefei city circle is a centered around Hefei economic zone,Hefei dominance in the economy,and lead the other six cities to develop together,as a core city,Hefei to play the role of a leader to take the lead,not only to speed up its construction of city,also need to coordinate the other six urban infrastructure construction,to prevent unnecessary contradiction and conflict,to speed up the all-round development of traffic infrastructure construction of Hefei city circle,build the network traffic space.

3.4. Seize Opportunities, Innovate and Develop

As can be seen from the national master plan,the Yangtze river delta city cluster is centered on Shanghai, and Jiangsu, Zhejiang and Anhui provinces are parallel.Hefei will work side by side with Nanjing and Hangzhou to build this world-class city cluster.Moreover,Hefei is also the node city of "One Belt And One Road".Cities in the metropolitan area of Hefei are in the important areas of the national development strategy.Seizing opportunities,accelerating development and enhancing overall strength make the metropolitan area of Hefei accelerate the regional economic and social integration construction and further enhance its strategic position in the national development model.

Hefei is the only national pilot city for scientific and technological innovation in China.Science and technology is the primary productive force.To realize economic development,we must attach importance to the innovation of science and technology.Therefore,the government can introduce a series of related policies around the innovation of science and technology to attract the development of high-tech industry companies.The innovation of science and technology also needs the innovation of talents,so as to attract talents from various universities in the metropolitan area and universities nationwide,establish innovation teams and train innovative talents,build a high-level innovative talent team,and promote the innovative development of Hefei.

4. Conclusion

The construction of Hefei metropolitan area is a major systematic project, a powerful opportunity in the development process of anhui province, and a common responsibility of seven cities in the metropolitan area. Win-win cooperation is the theme of The Times. Relevant governments should strengthen regional economic cooperation and the construction of cultural environment, increase the support of governments in economically backward regions, promote coordinated and innovative development, promote high-quality economic development of Hefei metropolitan area, and realize the strategic goal of Hefei metropolitan area construction.

Acknowledgements

Anhui province philosophy and social science planning project "research on spatial interaction effect in the urbanization process of hefei metropolitan area from the perspective of new economic geography" AHSKY2015D52.

References

 T.Chen, F.Zhao: Development model, experience and Suggestions of Hefei national science and technology innovation pilot city, Journal of Anhui Normal University(natural Science Edition), Vol. 36(2013) No.4, p.404-408.

- [2] Z.Y.Du, S.L.Chen:Analysis of spatial and temporal differentiation and spatial structure of economic development in Nanjing metropolitan area, Journal of Fujian normal university (natural science edition), (2019)No.3, p.104-108.
- [3] C.X.Huang: Suggestions on promoting the integrated development of transportation infrastructure in Hefei metropolitan area--lessons from the integration of transportation infrastructure in Wuhan,Nanjing and Hangzhou metropolitan areas, Journal of the party school of Hefei municipal committee of the communist party of China, (2017)No.6, p.11-14.
- [4] X.M.Xie: Research on the operating mechanism of collaborative innovation effect:a metropolitan area perspective, Science of science research, Vol. 31(2013) No.12, p.1907-1920.
- [5] J.R.Zhuang: Spatial and temporal pattern evolution of radiation field in central cities from the perspective of accessibility--a case study of Zhejiang province, Regional research and development, Vol. 36(2017) No.5, p.50-56.
- [6] Z.L.Li, T.T.Fu,Z.A.Ren, X.L.Liao:Research on the spatiotemporal evolution of urbanization quality in Hefei metropolitan area, Journal of chuzhou university, Vol. 20(2008) No.1, p.81-87+136.
- [7] Lu, C.X.Huang: Research on integration of transportation infrastructure in metropolitan area--a case study of Hefei metropolitan area, China engineering consulting, (2018)No.5, p.73-76.
- [8] H.Lin: Reference and inspiration for the development of world metropolitan area[J].Statistical science and practice, (2017)No.1, p.6-9.