

Research on the Transformation and Development Path of Industrial Structure in Anhui Province under the Background of New Urbanization

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Abstract

With the deepening of new urbanization, the transformation and development of industrial structure in Anhui Province is facing new opportunities and challenges. Based on the background of new urbanization, this paper deeply discusses the development path of industrial structure transformation in Anhui Province, aiming to provide theoretical support and practical guidance for the high-quality development of regional economy. Firstly, this paper analyzes the concept and characteristics of new urbanization and its interaction mechanism with industrial structure transformation, and clarifies the internal relationship between urbanization and industrial structure. Then, through empirical analysis, it reveals the current situation, existing problems and challenges of industrial structure in the process of urbanization in Anhui Province. The study found that the overall level of industrial structure in Anhui Province is not high, the primary industrial base is weak, the secondary industrial intensification is low, and the tertiary industrial development lags behind. In response to these problems, the article puts forward corresponding countermeasures and suggestions: in the primary industry, promote agricultural modernization, improve the scale and efficiency of agricultural management entities; in the secondary industry, the implementation of innovation-driven development strategy, improve the competitiveness of industrial clusters; in the tertiary industry, accelerate the development of modern service industry, promote the optimization and upgrading of industrial structure. In addition, the article also emphasizes the importance of supporting the agglomeration development of strategic emerging industries. Finally, the article points out that Anhui Province should adhere to the people-centered approach, promote the high-quality integrated development of urban and rural areas, comprehensively improve the quality of urbanization, and embark on a green, healthy and sustainable urbanization path to achieve coordinated development of industrial structure and urbanization.

Keywords

New Urbanization; Industrial Structure; Urbanization Level; Development Path.

1. Introduction

1.1. Research Background

The new urbanization is based on urban and rural areas as a whole, urban and rural integration, production city interaction, economical and intensive, ecological livable, harmonious development as the basic characteristics of urbanization, is the coordinated development of large and medium-sized cities, small towns, new rural communities, mutual promotion of urbanization[1]. Common prosperity is the living standard of all people through hard work and mutual help to finally achieve ample food and clothing, that is, universal prosperity on the basis of eliminating polarization and poverty[2]. Promoting new urbanization and improving the

quality of urbanization development are of great significance to common prosperity. It has greatly accelerated the pace of China's entry into socialist modernization[3]. Since the reform and opening up, China's urbanization rate has increased by 1.02 percentage points annually; since 2000, the urbanization rate has increased by 1.36 percentage points annually. In 2012, the urbanization rate reached 52.57 %, which is roughly equivalent to the world average. The number and scale of cities and towns are expanding, and the form of urban agglomerations is more obvious. The three major urban agglomerations of Beijing-Tianjin-Hebei, Yangtze River Delta and Pearl River Delta have gathered 18 % of the population with 2.8 % of the land area and created 36 % of the gross domestic product, which has become the main platform for China's rapid economic growth and participation in international economic cooperation and competition. The comprehensive service capacity of the city has been significantly improved, and the living environment has been gradually improved.

However, we must also see that the problem of low quality of urbanization in China is becoming more and more prominent[4]. With the continuous development of the economy under the new urbanization, the industrial structure has been evolving from low level to high level, and the industrial connection has been changing from simple to complex. The transformation of industrial structure refers to the process of promoting the rationalization and advanced development of industrial structure, and is the state of realizing the adaptation of industrial structure to resource supply structure, technical structure and demand structure[5]. It is necessary to promote the optimization and upgrading of industrial structure, and form an industrial pattern with high-tech industry as the guide, basic industry and manufacturing industry as the support, and comprehensive development of service industry[6]. In recent years, China's urbanization has developed rapidly, the scale of population has been increasing, and urban areas have been expanding. However, it should be noted that the expansion rate of urban areas far exceeds the increase in the scale of population[7]. The corresponding infrastructure, especially rural infrastructure, has not kept up with the pace of urbanization expansion. There are problems such as the difficulty of truly realizing urban citizenization in rural areas, and the actual urbanization rate is far lower than the nominal urbanization rate[8]. In view of the problems existing in the development of urbanization, the central economic work conference in 2012 put forward the concept of " new urbanization. "

1.2. Research Significance

The transformation and development of industrial structure is closely related to economic growth. Optimizing the industrial structure is conducive to achieving sustained and rapid growth of the national economy, improving economic efficiency, and achieving a balance between total supply and total demand[9]. It is of great significance to realize the optimization and upgrading of industrial structure and explore the development path of industrial structure under the background of new urbanization to promote the development of China's entire national economy. Exploring how to realize the transformation and development of the industrial structure in Anhui Province under the background of new urbanization can achieve a higher level of urbanization and industrial structure upgrading in new cities, so as to promote inter-regional interconnection, accelerate resource flow, coordinate urban and rural development, and improve rural infrastructure[10]. The development of the secondary industry drives the development of the tertiary industry, optimizes and upgrades traditional advantageous industries, cultivates emerging leading industries, realizes the coordinated development of new urbanization and industrial structure upgrading, and achieves the goal of sustained, healthy and stable economic development.

2. New Urbanization and the Present Situation of Industrial Structure Construction in Anhui Province

2.1. The Present Situation of New Urbanization in Anhui Province

New urbanization is the only way to modernization and the inevitable choice to accelerate the construction of a modern and beautiful Anhui in the new stage. Anhui Province adheres to human-centered urbanization, strives to enhance the ability of agricultural transfer population to settle in cities, strives to enhance the attractiveness and carrying capacity of cities and towns, and strives to strengthen the ability of factor security. The urbanization rate of permanent residents in the province increased from 50.97 % in 2015 to 58.33 % in 2020, and the urbanization rate of household registration population increased from 27.6 % in 2015 to 37.24 % in 2020.

Closely linked to 'people', further promote the citizenization of agricultural transfer population. We will deepen the reform of the household registration system, effectively lower the threshold for urban settlement, set up urban public collective household registration, and carry out one-stop unlicensed migration of household registration throughout the province. During the 13 th Five-Year Plan period, a total of 7 million agricultural transfer population settled in cities and towns. By carrying out the registration of rural assets confirmation and promoting the identification of members of rural collective economic organizations, we will safeguard the rights and interests of the transferred agricultural population in rural areas. Closely linked to the 'city', focus on optimizing the layout of urbanization and improving urban functions. Focusing on creating a high-quality space for gathering population and better meeting the needs of citizens, we should actively promote the construction of urban agglomerations, metropolitan areas and central cities, and comprehensively improve the quality of cities. Combined with the implementation of national strategies such as the integrated development of the Yangtze River Delta and the high-quality development of the central region, we should actively participate in the construction of the Yangtze River Delta urban agglomeration and the Central Plains urban agglomeration, and focus on optimizing the spatial pattern of urbanization. Through the construction of a reasonable division of labor, outstanding advantages, distinctive industrial system, to further enhance the radiation driving ability of Hefei, Wuhu, Anqing, Fuyang, Bengbu, Huangshan and other cities.

2.2. Analysis of the Proportion of the Current Industrial Structure in Anhui Province

In the past ten years, the total GDP of Anhui Province has grown rapidly and steadily. In 2020, the total GDP of Anhui Province was 38680.63 billion yuan, ranking 11th in the country, an increase of 3.9 % over the previous year. From the perspective of industrial structure layout, the added value of the primary industry is 318.47 billion yuan, accounting for 8.23 % ; the added value of the secondary industry is 1567.17 billion yuan, accounting for 40.52 % ; the added value of the tertiary industry was 19824.3 billion yuan, accounting for 51.25 %. From 2016 to 2020, the primary industry in Anhui Province grew slowly, and its contribution rate to regional GDP was low. The secondary industry has obvious advantages, but the growth rate has slowed down in recent years ; the tertiary industry has developed rapidly and has gradually surpassed the secondary industry and become the main force contributing to regional GDP. Preliminary accounting, in 2021, the province's total output value was 4295.92 billion yuan, an increase of 8.3 % over the previous year, with an average growth of 6 % in two years. The added value of the primary industry is 336.06 billion yuan, an increase of 7.4 % ; the added value of the secondary industry was 1761.32 billion yuan, an increase of 7.9 %, of which the industrial added value was 1308.17 billion yuan, an increase of 8.9 %, and the added value of the manufacturing industry was 113.54 billion yuan, accounting for 26.4 % of the province's GDP,

an increase of 0.6 percentage points over the previous year ; the added value of the tertiary industry was 21985.4 billion yuan, an increase of 8.7 %. The three industrial structure was adjusted from 8.4 : 40.0 : 51.6 in the previous year to 7.8 : 41.0 : 51.2. It is expected that the annual total labor productivity is 132467 yuan / person, an increase of 15463 yuan / person over the previous year. According to the resident population, the per capita GDP was 70,321 yuan (US \$ 10,900), an increase of 7910 yuan over the previous year. At the end of the year, the province's resident population was 61.13 million, an increase of 80,000 over the end of the previous year ; the urbanization rate of the resident population was 59.4 %, an increase of 1.1 percentage points.

2.3. The Current Situation of Industrial Structure Transformation and Construction under the Background of New Urbanization

As an important energy supply base, raw materials and processing and manufacturing base in China, Anhui Province has obvious competitive advantages in traditional industries. It has formed traditional advantageous industries such as materials and new materials, energy and new energy, electronic information and household appliances, automobile and parts manufacturing, food and medicine, and chemical industry. At the same time, with the rapid development of new service industries such as finance, tourism, real estate, accommodation and catering, transportation, warehousing and postal services, the contribution of the tertiary industry to the total GDP in recent years has gradually surpassed the traditional advantage of the secondary industry. The transformation and upgrading of industrial structure in Anhui Province is generally good. However, at present, the economic development of various cities in Anhui Province is extremely uneven. The economic aggregate of Hefei, the capital city of Anhui Province, occupies an absolute leading position in the province, and the gap between the economic development level of Hefei and other cities is obvious. In 2020, the total GDP of Hefei City will exceed 1 trillion yuan, the second-ranked Wuhu City will not exceed 400 billion yuan, and the remaining cities will not exceed 300 billion yuan.

3. The Problems Existing in the Process of Industrial Structure Transformation and Development in Anhui Province

3.1. The Overall Level of Industrial Structure is Not High

Since the 12 th Five-Year Plan, the overall economic development of Anhui Province has been good, and the regional GDP has maintained an average annual growth rate of 23.8 %. The overall growth of the industry is fast. Among them, the secondary industry is developing rapidly. In 2011, the contribution rate of industry to economic growth reached 63.47 %. Industry has become the leading force in the province's economic development. The proportion of primary industry in GDP is 13.17 %. Compared with the national level, it is 3.17 percentage points higher, and the proportion of the tertiary industry in GDP is far lower than the national level. There are still unreasonable phenomena in the industrial structure. Especially compared with the eastern developed areas, the overall level of industry in Anhui Province is still low. The low-level industrial structure has seriously restricted the further economic growth and new urbanization process in Anhui Province. In 2011, the labor productivity of Anhui Province was only equivalent to 60.1% of the national average. From the perspective of the three industries, the labor productivity of the primary industry accounted for 70.59 % of the national average ; the secondary industry is close to 81.84 % of the national average ; the labor productivity of the tertiary industry is very different from the national average, less than half of the national level, only 44.64 %.Second, the ability of industrial sustainable development is weak. Although the growth rate of high energy-consuming industries in Anhui Province has slowed down significantly since 2011, the proportion is still large, which poses a severe challenge to the

construction of new industrialization in the province. Third, the development of the tertiary industry is slow and uneven. According to the law of industrial structure evolution, with the development of economy, the industrial center of gravity should gradually shift to the tertiary industry.

3.2. The Foundation of the Primary Industry is Unstable

The operation scale, benefit and radiation driving ability of the new agricultural management entities need to be improved. Anhui planting industry accounts for a large proportion of agriculture, animal husbandry and fishery account for a small proportion, and the proportion of internal economy and feed crops in planting industry is not high. The production scale of pollution-free, green and organic agricultural products is small, the number of certifications is small, and the quality structure of agricultural products is not excellent. The development of agricultural product processing industry is still insufficient, and the lineup of agricultural leading enterprises is not strong enough ; the degree of integration and development of the primary, secondary and tertiary industries at the level of agricultural management entities is not high, and the agricultural socialized service industry has yet to be improved, which restricts the further improvement of Anhui's agricultural efficiency. Rural power facilities are relatively weak, and it is difficult to fully meet the demand for agricultural electricity. The infrastructure of agricultural science and technology extension is backward, the information infrastructure is weak, the infrastructure construction of water, electricity and road in high-efficiency agricultural base is lagging behind, and the pollution treatment facilities of livestock and poultry breeding industry are still weak. The level of agricultural equipment is still backward. The development of seedling raising factories is insufficient, the mechanical transplanting rate of rice is low, and the mechanization degree of farming and harvesting of corn, cotton and rape is still not high. In the main grain and oil producing areas, advanced and practical agricultural machinery and equipment are generally insufficient.

3.3. The Intensive Degree of the Secondary Industry is Not High, and the Industry Competitiveness is Weak

The industrial categories in Anhui Province are relatively complete, but the industry concentration is low, and there is no scale advantage. Most enterprises are small in scale and economies of scale have not been fully utilized. The cultivation and development of industrial clusters in Anhui Province is relatively slow, and the composition of enterprises in the cluster is not reasonable enough. Most of the leading enterprises in Anhui Province have no business contact with local small and medium-sized enterprises, and the supporting industries can not meet the needs of buyers at present, which leads to the fracture of the whole chain, thus affecting the development of the whole industry. Compared with the coastal developed areas such as Zhejiang and Guangdong, the current industrial weakness is mainly manifested in the following aspects : First, the degree of division of labor is limited, and the relationship between professional division of labor and cooperation in the full sense has not been formed. The specialized production advantages of small and medium-sized enterprises are not obvious, and there is a lack of leading enterprises, which cannot play a leading role in promoting ; second, the degree of correlation between enterprises in the cluster is low, they are fighting each other, lack of a relatively perfect division of labor and cooperation system, and thus lack of overall competitiveness ; third, the supporting measures of industrial agglomeration are not perfect and there is a lack of corresponding policy system to support industrial clustering. At the same time, there are some problems in the governance model of industrial clusters.

3.4. The Development of the Tertiary Industry is Lagging Behind

From the perspective of the development of the tertiary industry structure, the level is low. The tertiary industry covers a wide range of sectors, both traditionally backward sectors and

modern sectors. The characteristic of traditional service industry is that it is labor-intensive, and the employees do not need high technology or knowledge. Its services are mainly to meet the basic needs of consumers, including warehousing, wholesale, retail, catering, postal and telecommunications industries. Modern service industry is mainly knowledge-intensive and technology-intensive. It requires workers to have higher quality and provide high-level services for producers and consumers. The tertiary industry in Anhui is mainly traditional business and other service industries, while the proportion of high-level production and life services such as finance, insurance and other industries is too low. At the same time, the tertiary industry output value accounted for the proportion of GDP and the proportion of employment is still relatively low, from the "three two one" developed structure type is still relatively far. Therefore, both the level of the three industrial structures and the development level of the internal industrial structures are generally low.

4. Suggestions on the Development of industrial Structure Transformation Path in Anhui Province

4.1. Primary Industry: Vigorously Promote Agricultural Modernization

Vigorously promote the modernization of agriculture, we need to start from the 'three rural' aspects, namely agriculture, rural areas and farmers. In agriculture, one is the production facilities, which mainly includes farmland facilities and supporting water conservancy facilities. The second is social service, focusing on the social service system covering the whole industrial chain of agriculture. The third is industrial integration, focusing on the integration and development of rural primary, secondary and tertiary industries as an important form. This 'three modernizations' is the key support for agricultural modernization, and it is also necessary to ensure the harvest of drought and flood. It is not only the problem of irrigation and drainage, but also the material conditions such as mechanical equipment and practical technical equipment, which expresses the modernization of agricultural 'production'. In rural areas, the first is the convenience of life, focusing on the improvement of rural living facilities and the equalization of basic public services. Second, the environment is green, the focus is on the management of mountains, rivers, forests, lakes, grass and sand systems, the rural living environment has improved significantly, and the green low-carbon production and lifestyle has been widely implemented. Third, governance is efficient. This 'three modernizations' is a concentrated expression of rural modernization. It is necessary to achieve beautiful mountains and rivers, improve the living environment, control non-point source pollution, and intoxicating rural scenery, which shows the revitalization and excellence of rural 'ecology'.

4.2. The Secondary Industry: In-depth Implementation of Innovation-driven Development Strategy

The report of the 18th National Congress of the Communist Party of China proposed that China will enter the ranks of innovative countries by 2020. As an internationally recognized innovative country, the contribution rate of scientific and technological innovation to economic development is generally more than 70%, the proportion of R & D investment in GDP is more than 2%, and the external dependence of technology is less than 20%. At present, under the background of new urbanization, the strategic goal of innovation-driven development in Anhui Province should be decomposed and refined, and the organizational structure and task system for achieving the goal should be established, so that all departments, levels and units can advance according to clear objectives and tasks. Many industries in Anhui Province are at the middle and low end of the industrial chain, with high consumption and low profits, which are subject to people. Only with strong independent innovation ability can we seize the opportunity and win the initiative in the fierce competition. First of all, further establish the dominant

position of enterprises, so that enterprises become the main body of technology demand selection and technology project determination, and become the main body of technological innovation investment and innovation achievement industrialization. Secondly, universities, R & D institutions, intermediaries, governments and financial institutions should work together with enterprises to build an innovation chain of division of labor and organic combination. Establish an institutional mechanism for the rational flow of scientific and technological innovation resources, and promote the efficient allocation and comprehensive integration of innovation resources ; establish an institutional mechanism that organically combines the role of the government and the market mechanism, so that the market can give full play to the basic regulatory role, and the government can give full play to the role of guidance, regulation and support ; establish a scientific innovation evaluation mechanism to give full play to the initiative and creativity of scientific and technological personnel.

4.3. The Tertiary Industry: Accelerate the Development of Modern Service Industry

In the era of knowledge economy, the service industry belongs to the category of knowledge economy, and the modernization and structural optimization of the service industry are the key to high-quality development. From the perspective of mutual promotion of efficiency improvement and welfare, new development requirements such as innovation potential, employment quality, and sustainable urbanization are directly related to the development level of the service industry. The quality of the service industry determines the quality of development. The policy measures to promote the upgrading of the service industry can be focused on the following aspects. To promote the governance and reform of the upgrading of the service industry structure in Anhui Province, we should adhere to the principle of multi-objective dynamic balance and the principle of top-level design, expand the channels for market players to obtain resources and opportunities, and adjust government functions to institutional supply and promote cooperation. The first is to encourage knowledge creation ability, protect intellectual property rights, and improve market contract norms. The second is to build an innovation system, in terms of the creation and dissemination of basic knowledge, to enhance the tripartite cooperation between the government, the market and universities, and to enhance the capacity of public services. Third, the promoting effect of knowledge economy is related to its diffusion and penetration range, such as the Internet, information and communication services, which need to break the administrative monopoly of the department and make full use of the infinite possibility of knowledge innovation.

The characteristic of high-end urbanization in the late stage of industrialization is the trend of factorization of service industry, and the efficiency of service industry is reflected in the improvement of labor factor quality. In this sense, the service industry is reflected in the input of production factors, so the realization of service efficiency will eventually be generated through the real economy. On the one hand, we should increase support for manufacturing industry in investment and financing policies and fiscal policies, on the other hand, we should promote the integration of informatization and industrialization in industrial policies, and consolidate the two efficiency support foundations of the real economy and knowledge economy. In short, in view of the changes in the development stage and the importance of the establishment of the internal circulation mechanism, the development of the service industry in the process of new urbanization in Anhui Province, the mining of consumption potential and the formulation of macro policies need to be comprehensively considered from the perspective of industrial integration and economic and social integration. The focus is to enhance the high-end service industry such as science, education, culture and health, and to promote the development of the real economy with its creative ability of new formats.

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