Review on the connotation, Evaluation and Path of Industrial High Quality Development in the Yellow River Basin

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Abstract. The Yellow River Basin is an important ecological barrier and an important economic zone in China, which plays a very important role in ecological security and economic and social development in China. The industrial foundation of the Yellow River Basin is solid, with huge market potential, but there are also many problems. Through literature combing, identifying the connotation of watershed industrial high-quality development, comparing the evaluation index system of industrial development quality, summing up the countermeasures and suggestions of high-quality development path, which provides useful inspiration for the study of high-quality development theory of watershed industrial economics and economic geography in China.

1. Introduction
The Yellow River Basin is an important ecological barrier and an important economic zone in China. It has an important position in the national land development pattern. The industrial base is sturdy and the market potential is huge, but the problems are also obvious: fragile ecological environment, contradiction between human beings and water, water and sand; the overall development is lagging behind and the regional development is imbalance; the regional connection is weak, the central city driving capacity is not strong; the industry structure is resource-intensive and labor-intensive, water-consuming industry proportion is high; the innovation factor input is insufficient. On September 18th, 2019, General Secretary Xi Jinping put forward that, ecological protection and high quality development of the Yellow River Basin are major national strategies. Strengthening the ecological protection and control of the Yellow River; promoting the high-quality development of the Yellow River Basin and improving the life of the people; protecting, inheriting and carrying forward the Yellow River culture are of great significance to maintaining social stability and promoting national unity. At present, "high quality development research" has become a hot topic in the field of economics. It is worth thinking about how to understand the connotation of high quality development of watershed industry from the perspective of economic geography? Can the traditional evaluation index reveal the high quality characteristics of the industry in the Yellow River Basin, which has special ecological environment, economic environment and cultural environment? Based on the theory of high-quality development, can we rebuild the comprehensive index system of industrial quality based on watershed ecological, economic and cultural evaluation? These are the problems that economic geography needs to pay attention to and solve. The connotation of high quality development of watershed industry was identified through literature combing, the evaluation index system of industrial development quality was compared and analysed. Then combining high quality development with watershed industrial economy, and reconstructing the measurement model of watershed industrial development quality. At last we summarized the counter measures and suggestions of high-quality
industrial development path in accordance with the ecological background characteristics of the Yellow River Basin.

The difference between "high quality growth" and "high speed growth" was first studied by foreign scholars. Barro(2002) noted that the quality of economic growth, not only means total growth, but also related with social, political and religious factors [1]. Mlachila et al (2014) considered that for developing countries, Higher and more sustained social-friendly growth is a high-quality growth [2]. The domestic research on high quality growth has experienced the transformation from current political hot spot to academic proposition research [3-8].

The report of the Nineteenth National Congress of the Party made an important conclusion that China's economy has entered the stage from high-speed growth to high-quality development in the new era. After that, domestic scholars began to focus on the new proposition of high quality development. For example, An Shuxin (2018) systematically combed the relevant literature on the connotation of high-quality development in the new era from four aspects: the transformation of social contradictions and the change of development concept in China, the macro meso-micro-scale angle, the angle of supply and demand and input-output, and the angle of problem [9]. Ren Baoping and Li Yumo (2018) revealed the difference between high quality development and high speed growth from four aspects: goal, connotation, value judgment and requirement. He think that high quality development emphasizes the combination of economic, social and ecological benefits, and embodies an inclusive growth coordinated by human and economic society. And the connotation of high quality development should include five high quality dimensions: economic development, reform and opening up, urban and rural development, ecological environment and people's life [10].

High quality development is a new development concept and development model under the premise of judging the change of the main social contradictions in China. The ultimate goal of high-quality development is to meet the real needs of the people, which makes it have the characteristics of social welfare effect, that is, development can bring people a greater sense of acquisition, happiness, and security. High quality development concept is a dual value orientation with the goal of quality and benefit, which includes innovation, coordination, green, openness and sharing [11]. The high-quality development model is not only different from the extensive extension development, but also different from the intensive connotation development. Although the latter two are different in the efficiency of input and output, they are not beyond the category of production function in essence, and are still the problem of the number of unit input and output [12]. Besides considering input-output efficiency, high-quality development also involves the connotation, level and structure of output, the size of welfare effect of output, which reflects the quality attribute of output [12]. And this also makes the high quality development reflect the high level structure form characteristic, that is, manifesting higher level of industrial development, higher level and quality of the product and service, higher level of the economic form, unceasingly emerges new industry and new pattern [13]. High quality development emphasizes the sustainability of growth power. Under its guidance, new industrialization, information, urbanization and agricultural modernization develop simultaneously, the economic structure is more reasonable, the spatial layout is more scientific, the industrial division of labour is more refined, and the sustainability of development is constantly improved. From the perspective of goal-oriented, structural transformation and upgrading and development sustainability, high-quality development refers to the economic development mod, structure and dynamic state that can better meet the real needs of the people [13]. The connotation of high-quality industrial development includes the following contents: the products and services produced can meet the increasing quality needs of the people; higher proportion of innovate elements; the production technology is more advanced; the industrial structure is more perfect, the system is healthier, the coordination, linkage and balance between industrial departments are stronger; the industrial space layout is more scientific and the industrial space connection is stronger; the industrial regional division of labor is more coordinated and the regional development is more balanced; the industrial development is greener and more energy-efficient.
2. Evaluation index system of industrial high quality development

Different people have different understanding of the connotation and extension of high quality development, which leads to the lack of consistency assessment of high-quality economic development. It requires to establish a unified index system to evaluate the economic development quality in order to find and solve problems. In the past, the index system mainly reflected the increment speed, economic aggregate, the financial index and so on. There are few indicators reflecting social development and harmonious between human and nature, and lack of integrity and global perspective [10]. At present, some scholars have begun to pay attention to and try to build a high-quality development evaluation index system. Jinbei (2018) pointed out that the goals and contents of development quality are multidimensional, so the construction of high-quality development evaluation index system presents complexity. Evaluation criteria for high-quality development should include five aspects: innovation, coordination, green, openness and sharing [13]. Ren Baoping and Li Yumo (2018) think that the evaluation index of high quality development should reveal structural coordination, quality benefit and new kinetic energy development, attach importance to the development of people's livelihood and the improvement of resources and environment. The construction of high-quality development index system should be explored from multiple dimensions such as long-term and short-term, macro and micro, total and structure, global and local, economic and social [10]. Chao Xiaojing and Ren Baoping (2011) set up 28 indicators from four aspects: the structure and stability of economic growth, the welfare change and distribution of results, the resource utilization and the cost of ecological environment. Then measured the spatial and temporal pattern of economic growth quality in provinces since China's reform and opening up in the past 30 years [14]. Shi Bo, Ren Baoping (2018) constructed an index system from the two dimensions of economic growth fundamentals and social achievements to measure the interprovincial differences in the high quality development of China's economy[15]. Based on the relevant index system at home and abroad, Li Jinchang et al (2019) constructed high quality development evaluation index system composed of 27 indexes from five parts: economic vitality, innovation efficiency, green development, people's life and social harmony[16]. The deficiency is the lack of empirical analysis to verify whether the index system can reflect the actual situation of China's development.

These evaluation index systems have their own characteristics, but there are still something to be improved: firstly, to avoid the recurrence of indicators with high correlation or similarity, for example, capital output efficiency, labour productivity, and total factor productivity in the above index system have a strong correlation or similarity. Secondly, the selection scope of some indicators needs to be clear, such as the new economy and new kinetic energy industry, and the modern service industry. Thirdly, the index system mostly considers the problem of high-quality economic development from the whole angle, few scholars pay attention to the problem of high-quality development of specific industries, and consider a few aspects, such as industrial structure [17], market opening [18], international competitive [19], technological innovation [20], resources and environment[21], etc. For the Yellow River basin with special ecological environment background, water resources environment constraint index should be used as an important index to evaluate the high quality development of watershed industry. What can be seen from Tab.1 is the evaluation index system of high quality industrial development in the Yellow River Basin. Formatting the text

| Evaluation perspective | Evaluation indicators                                      |
|------------------------|----------------------------------------------------------|
| Industrial vitality    | Average annual industrial growth rate                     |
|                        | Added value of new economy and new kinetic energy industry |
|                        | Per capita output                                         |
|                        | Dependence on Industry and Foreign Trade                  |
| Innovation             | Value added in high-tech industries                       |
efficiency

Calculation based on production function
- R&D investment intensity
- R&D full-time staff

Industrial structure
- Industry concentration index
- Value added in high-end manufacturing
- Value added of green ecological agriculture
- Value added in modern services

Spatial layout
- Gini Index of industrial space
- Index of industrial spatial linkages
- Location
  - Energy consumption
  - Water consumption
  - Water pollution intensity
  - Air pollution intensity
  - Pollution intensity of solid waste
  - Sewage treatment rate
  - Surface water quality

3. Path of industrial high quality development

Ren Baoping (2018) summarized the path of high quality development from two aspects: theoretical orientation and practical orientation, especially affirming that innovation will become the first driving force of high quality development in the new era [22]. Yu Yongze and Hu Shan (2018) also pointed out that innovation drive is the first driving force to promote high-quality economic development [23]. In addition, it also put forward the path of high-quality development in the aspects of market-oriented reform, a new round of opening to the outside world, and the goal orientation of improving the people's quality of life. Chen Jin, He Ning (2018) take the equipment manufacturing industry as an example to study the upgrading path and countermeasures of manufacturing industry under the background of high quality development, and put forward some countermeasures and suggestions such as guiding industrial policy, improving enterprises' independent innovation ability, building military-civilian integration industry gathering place, promoting the establishment of industry-university-research integration mechanism based on technology maturity, and actively integrating into international division of labour network. This study provides an effective reference for industrial structure upgrading, spatial optimization and seeking innovative network cooperation mechanism under the background of high quality development. Fang Chuanglin (2019) summed up the key path of the high quality development of new urbanization in China from the aspects of the integration of production and city, the integration of urban and rural development, the main function of different regions, the construction standardization of small towns with characteristics, and the promotion of the carrying capacity of regional resources and environment [25]. For the path mechanism of high-quality industrial development in the Yellow River Basin, in addition to the innovation factor drive, market-oriented reform, opening to the outside world, policy guidance and industrial structure upgrading proposed by the above scholars, we should consider the fragile ecological environment of the Yellow River Basin, such as human and water contradictions, water and sand contradictions, and the social and economic attributes of the central city, such as economic links in the basin. We should pay more attention to the optimization of industrial space, promote the flow of production factors, the rationalization of regional division of labour, the drive of central cities, the carrying capacity of resources and environment, and ecological compensation.

Footnotes

Footnotes should be avoided whenever possible. If required they should be used only for brief notes that do not fit conveniently into the text.

4. Comments on existing studies

Since the economic development of our country has changed from the stage of high speed growth to the stage of high quality development, the academic circles have begun to pay attention to and study the related problems of high quality development. At present, the characteristics and problems of the
research on the problem of high quality development of industry are as follows: firstly, the high quality development of industry is an academic hot spot born by the national development strategy, the research foundation is weak, the literature is less, and the research is relatively simple. Secondly, the high-quality development of industry has distinct characteristics of the times and is a major national strategy. There are many researches on the great significance of realizing high quality development in academic circles, but there are few researches on its connotation, evaluation index system, realization path and so on. Thirdly, the research academic group of high-quality development is concentrated in the field of economics, and few geographers participate in it. Although there are more achievements in the industrial layout and ecological environment constraints in the watershed, it has not yet seized the frontier position of high quality industrial development research, which is inevitably a great loss in the field of geography. The ecological protection and high quality development of the Yellow River Basin have become a major national strategy. This research problem with regional characteristics is the expertise of geography research, which provides an opportunity for the vast number of geographical scholars to combine the research of watershed industrial space with the development of high quality.

The author believes that for the high-quality development of the Yellow River Basin industry, geography can focus on the following aspects of research. Firstly, what is urgent is to study the connotation of high-quality industrial development. Combined with the background of the new era, this paper deeply explains the rich connotation of the high quality development of industry in the new era from the dimensions of goal orientation, innovation factor input, industrial structure and system level, coordination, linkage and balance among industrial departments, spatial layout and spatial connection, regional division of labour, green efficiency and so on. The second is to construct a scientific and operable industrial evaluation index system, and carry out empirical analysis on the Yellow River basin. As to the evaluation index system, it should consider the multi-dimensional and dynamic nature of the high quality development of industry and the ecological fragile watershed characteristics. The third is to reveal the temporal and spatial pattern process and evolution mechanism of manufacturing development quality in the Yellow River Basin. The fourth is to formulate countermeasures on the realization of high-quality industrial development, which including industrial structure upgrading, planning industrial parks, cultivating industrial clusters, regional industrial division of labour pattern optimization, central city drive and so on.

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