

Research on the Dynamic Subjects of Regional Green Competitiveness

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Abstract: As the green concept gradually deepens into the hearts of the people, people are paying more and more attention to the shortage of global resources and the deterioration of the ecological environment. Regional green development has become the trend of world economic development, and it also constitutes an important part of China's new development concept. The promotion of regional green competitiveness is the main manifestation of regional green development, therefore, it is very necessary to carry out research on the improvement of regional green competitiveness. This paper is a research on the dynamic subject of regional green competitiveness. Firstly, it reviews the research background of regional green competitiveness; secondly, it summarizes the basic connotation and dynamic mechanism of regional green competitiveness; then, it is concluded that the dynamic subjects of regional green competitiveness are government, enterprises, the public and green organizations; finally, it analyzes the action mechanism of each dynamic subject on regional green competitiveness.

1. Introduction

As the green concept gradually deepens into the hearts of the people, people are paying more and more attention to the shortage of global resources and the deterioration of the ecological environment, the goal pursued by regional development is no longer just economic growth, but gradually evolves into economic growth, social harmony, beautiful environment, technological progress and improved living standards of residents. Green development has become the trend of world economic development, and it also constitutes an important part of China's new development concept. Although the 18th and the 19th National Congress of the Communist Party of China focused on the issue of green development and the construction of an ecological civilization system, China has also achieved positive results in promoting resource conservation, comprehensive utilization and promoting cleaner production. However, the environmental cost of economic growth is too high, the traditional economic growth mode of high-consumption, high-emission, low-efficiency has not yet been fundamentally changed. The contradiction between economic development and environmental protection seems to be a difficult problem for both fish and bear's paw. Regional green development is mainly reflected in the improvement of regional green competitiveness. Therefore, it is particularly important to study how to promote regional green development and enhance regional green competitiveness. This is not only a hot issue in current research, but also the key to determine whether China's future economic development can achieve high-quality growth.

2. Related Research on Regional Green Competitiveness

2.1 The Basic Connotation of Regional Green Competitiveness.

Research on green competitiveness began at Porter, who believes that green competitiveness is based on the environmental protection, health and sustainable development goals of the green economic model to achieve a competitive market advantage. This concept of combining economic

benefits with ecological benefits had set off a upsurge in research on green competitiveness. Subsequently, the research on green competitiveness has been continuously developed. At present, the research on green competitiveness is mainly in two aspects: On the one hand, it is a microeconomic study guided by the theory of “circular economy theory”, “green supply chain” and “green marketing”; on the other hand, it is a macroeconomic study with research directions such as “green GDP” and “green taxation”. Researchers include Michael. Porter (1991)^[1], Bonifant (1995)^[2], Xiaoying Hong (2002)^[3], Hongxi Chen (2010)^[4], Yunping Chen (2012)^[5].etc. Through the reference to previous studies and my own in-depth study, this paper's views on regional green competitiveness is: Regional green competitiveness is the green competitive advantage formed in the process of regional development, the final goal of the region is to realize the harmony and unity of economy, society and ecology. “Green” means “environmental protection, ecology, recycling, low carbon, health and sustainability”. Regional green competitiveness emphasizes the role of green as the core element, and it is necessary to embed the green concept into every aspect of regional development, so that regional society, politics, economy, culture and ecology can develop towards the green direction.

2.2 Research on the Dynamic of Regional Green Competitiveness.

Dynamic is the power, cause, motivation and goal of action, it refers to the factors and forces that can stimulate, promote and maintain material movements and human activities. Nowadays, China is committed to the coordinated development of economy and society, so it is particularly important to understand the dynamic factors of regional green competitiveness development. In the study of regional competitiveness, Lijuan Sun (2010)^[6] pointed out that all individuals, businesses and regional governments with subjective initiative are the main subjects in the interregional competition and can influent the outcome of competition between regions. It can be seen that Interregional competition is not carried out in a single subject, but many subjects participate in interregional competition by exerting their own influence. On the theoretical study of green competitiveness, Xiaoying Hong (2002) suggested that we can improve China's green competitiveness by formulating green policies, improving green laws, fostering green awareness, developing non-governmental green organizations and strengthening green theory guidance. In the study of regional circular economy, many scholars believed that the driving force of circular economy mainly comes from the government and the market. However, Yanping Zhang (2014)^[7] focused on the ecological view and believed that the biggest drawback of the development of regional circular economy is the lack of ecological power; Chaoquan Wang (2009)^[8] thought that in addition to the enterprise's interest-driven mechanism and the government-sponsored promotion mechanism, the dynamic mechanism for developing a circular economy should also consider the social demand-driven mechanism and the technological progress promotion mechanism, that is to say, the impact of public needs and the development of science and technology on the circular economy cannot be ignored. Research on the dynamics of low carbon industry development, from the perspective of allocating resources, Xiaoyong Huang (2015)^[9] believed that the game between the national government, local government and enterprises constitutes the driving force for the development of low-carbon industries; from the perspective of distinguishing internal and external sources of power, Chuanfang Wang (2011)^[10] pointed out that the development of low-carbon industrial clusters is not only driven by the construction of green competitiveness and the promotion of endogenous powers such as cooperation and innovation in enterprise clusters, it is also driven by external pressures such as carbon barriers to international trade, government policy incentives and increased public awareness of low-carbon consumption. In the study of green economy, Qi Chen (2007)^[11] took the green rural construction as an example, she believed that the green economy must pay attention to environmental protection and the effective use of resources to achieve the best coupling of economic and ecological benefits; the green economy needs to be developed through the renewal of ideas, the government's administrative guidance, the binding of laws and regulations, the traction of the green consumer market, the support of green technology and the support of green talents. In the study of ecological and economic integration symbiosis, Zhong Ziqian (2016)^[12] established a dynamic mechanism of

integration and symbiosis between the government, regional green organizations, enterprises and consumers that are mutually restrained and mutually motivated.

Through the above scholars' research on regional green development, the following conclusions can be drawn: The dynamic subjects of regional competitiveness are mainly the public, enterprises and regional governments; the main dynamic subjects of green competitiveness are government, enterprises, public and green organizations; the main dynamic subjects of the circular economy are governments, enterprises and the public; the main motive force for the development of low-carbon industry are governments, enterprises and the public; the main drivers of ecological and economic integration are governments, regional green organizations, enterprises and consumers. We can find that these economic concepts related to regional green competitiveness, such as green competitiveness, regional circular economy, low-carbon industry development, green economy development and ecological and economic integration, are not only similar in development mode, there are also some common features between the dynamic factors: (1) Development is not determined by singular dynamic factors. Green competitiveness, regional circular economy, low-carbon industry development and the development of green economy are not only dependent on a certain competition subject in the region, their development require the joint efforts of all dynamic subjects to be realized. (2) The basic dynamic factors for regional green development are basically the same. Regional development is inseparable from economic power, technological power and institutional dynamics, regional green competitiveness development needs to add many ecological powers based on the development of regional competitiveness. Economic power is mainly generated by enterprises, investors, governments and consumers; technological power is mainly generated by various scientific research institutions; institutional power is mainly generated by enterprises, governments, consumers, employees and non-governmental organizations; ecological power mainly comes from government, enterprises and the public.

3. The Dynamic Subjects and Mechanism of Regional Green Competitiveness

3.1 Definition of the Dynamic Subjects of Regional Green Competitiveness.

Due to the strong correlation between regional green competitiveness, low carbon competitiveness, green competitiveness, green economy and regional circular economy, it is possible to analyze and synthesize the relevant literature on their dynamic research to obtain the dynamic subject of regional green competitiveness development. However, it should be noted that regional competitiveness research is a competitive advantage brought by regional economic development; low-carbon competitiveness is to consider low-carbon factors in competitiveness research, and regional circular economy competitiveness refers to the consideration of circular factors and sustainable factors in the development of circular economy, the research of regional green competitiveness is to take into account the six factors of environmental protection, health, ecology, recycling, low carbon and sustainability in the development of regional economy. Therefore, the research on the dynamics of regional green competitiveness is a combination of other related competitive dynamics. The core of regional green competitiveness is green. therefore, from the ultimate goal of developing regional green competitiveness, it is necessary to embed the green concept into all aspects of regional development, so that the regional social, political, economic, cultural and ecological aspects can be developed in the green direction^[13]. To make the regional social, political, economic, cultural and ecological aspects green development, it is inseparable from the support and supervision of government policies, the green management of enterprises, the support and regulation of green environmental protection organizations, and green consumption behavior of the public. In summary, the dynamic subjects of regional green competitiveness can be summarized as the government, enterprises, the public and green organizations.

3.2 The Mechanism of the Dynamic Subjects to Regional Green Competitiveness.

From the government's perspective, government ecological regulation is the main thrust of regional green competition development. Without the active intervention of the government, resource

conservation and environmental protection awareness are difficult to occupy an important position in the decision-making thinking of enterprises and the public. The main role of the government's power is mainly two aspects: Support is the one hand. The regional government enhances regional green competitiveness through strong support for the ecological economy and the promotion of ecological and economic integration, and through the implementation of a series of incentive policies (such as financing assistance, government green procurement, fiscal green subsidies, environmental protection special fund support, discount loans, value-added tax, income tax reduction, production tax, etc.) to create a good external environment for the development of regional green economy. The other hand is the role of supervision. The government supervises and manages the corporate production and the public consumption through the formulation of green policies and the promulgation of green laws, and makes the regional green competitiveness improve by improving regional green GDP, building a green supply chain, developing green marketing, forming green consumption and promoting green technology development.

From the perspective of enterprises, enterprises as the most important producers of economic sources, only the vigorous development of enterprises can make the overall development of the region, so enterprises as the dynamic subjects of regional competitiveness are undoubted. The green innovation of enterprises is the basic driving force for the development of regional green competition. The function of enterprise green innovation is microscopically manifested as the implementation of ecological standards in product design, production, marketing and management, achieving clean production and green manufacturing; be mesoscopically manifested in the realization of the ecologicalization of the industrial system through the forms of ecological economy, economies of scale, and scope of the economy, thus forming an ecological park or industrial cluster; and be macroscopically manifested through the enterprise's ecological technology innovation, accelerating the institutional innovation and management innovation of regional entities, and promoting the comprehensive ecologicalization of regional economic, social, political and cultural fields.

From the perspective of the public, the public demand drives consumption to form economy. The development of the economy is inseparable from the public. Therefore, the public is the most basic dynamic subject of social and economic activities. The green lifestyle and green consumption model of the public are important pulls for the development of regional green competitiveness. Green consumption, also known as "sustainable consumption", is a collective term for various consumer behaviors and consumption patterns that are based on meeting ecological needs, with health and protection of the ecological environment as the basic connotation, and in line with human health and environmental protection standards. The green consumer demand of the public has a guiding role in market supply, which in turn drives enterprises to switch to green production. At the same time, the public also has the role of social supervision, which can guide and restrict the behavioral decisions of the government, enterprises and green organizations.

From the perspective of green organizations, green organizations are generally non-profit organizations, including industry associations, non-governmental green organizations and international green peace organizations. The role of green organizations as the dynamic subject of regional green competitiveness is mainly to support the development of green business. Green organizations can spread green ecological culture, carry out ecological education and conduct green theory guidance to make the public a sense of ecological environmental protection; at the same time, green organizations can use their unique resource advantages to provide enterprises with green production technology, making enterprises willing to and have the ability to produce environmentally friendly products. Some non-government green environmental protection groups can become the main force of the green market and the new force to promote sustainable development after marketization and specialization. They are not only committed to green propaganda, but also to the production and operation activities in the market: On the one hand, it exercises supervision over corporate behavior and government behavior that damage the environment and is not conducive to sustainable development; on the other hand, it raises a large amount of social capital through various channels and controls the flow of these funds.

In summary, the government must play a leading role in the development of regional green

competitiveness, effectively supervise the behavior of other dynamic subjects in regional green competitiveness, and formulate strategic plans and specific measures for the development of green competitiveness; Enterprises are the mainstay of resource conservation and environmental friendliness, and should actively produce green products to promote regional green development; The public is the most extensive participant in regional green development. It should consider intergenerational equilibrium and actively carry out green consumption to promote the development of social ecological civilization; Green organizations should use their unique resource advantages to provide enterprises with knowledge support and technical support for green production, enabling enterprises to produce green products while also being willing to produce green products.

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References

- [1] Michcel Porter, National Competitive Advantage (1990)
- [2] Bonifant B C, Arnold M B, Long F J. Gaining competitive advantage through environmental investments [J]. Business Horizons, 1995, 38(4): 37-47.
- [3] Xiaoying Hong. Some Theoretical Thoughts on Green Competitiveness[J]. Guangxi Social Sciences, 2002(03): 92-95.13.
- [4] Hongxi Chen. Theoretical analysis and empirical research on corporate green competitiveness [D]. Nanjing Agricultural University, 2008.
- [5] Yunping Chen. The essential attribute of regional green competitiveness [N]. Guangming Daily, 2012-05-04 (011).
- [6] Lijuan Sun, Xiaojun Xing, Dequn Zhou. A Summary of Regional Competitiveness Research and Analysis Based on Game Theory[J]. Industrial Technology & Economy, 2010, 29(07): 84-86.
- [7] Yanping Zhang. Research on the Construction of Ecological Power Main Body of Regional Circular Economy[J]. Journal of Shaanxi University of Technology(Social Science Edition), 2014, 32(01): 70-74.
- [8] Zili Tu, Chaoquan Wang. The Endogenous Dynamics of Enterprises Developing Circular Economy [J].Social Sciences Research, 2009(01):53-57.
- [9] Xiaoyong Huang, Yunping Chen. Research on the development design and dynamic mechanism of low carbon co-production industry in the process of low carbon transformation[J].Financial Education Research,2015,28(02):64-70.
- [10] Huanfang Wang, Zhenhua Hu. Analysis of the Dynamic Mechanism and Implementation Path of Low Carbon Industry Clusters[J]. Economic System Reform, 2011(05): 107-111.
- [11] Qi Chen, Kangwei Jin. Research on the Power Source of Developing Green Economy in the Construction of New Countryside[J]. Ecological Economy, 2007(08): 67-70.
- [12] Ziqian Zhong. Research on the Construction of Endogenous Dynamic Mechanism of Eco-economic Integration and Symbiosis——Based on Game Theory[A]. Singapore Management and Sports Science Institute. Proceedings of 2015 4th International Conference on Physical Education and Society Management(ICPESM 2015 V48) [C].Singapore Management and Sports Science Institute: Intelligent Information Technology Application Society, 2015: 6.
- [13] Peng Wu, Sijiang Jing. Research on Green Competitiveness of County Economy under the Concept of Green Development——Taking Hubei Province as an Example[J].SAR Economics, 2018(04):127-130.