

Research on the Innovation Diffusion Driving Mechanism of Economic Growth Quality

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Abstract: *This article delves into the innovation diffusion driving mechanism of economic growth quality. Through a detailed analysis of the innovation diffusion mechanism, this article reveals its key role in improving the quality of economic growth, and particularly emphasizes the importance of technological and institutional innovation as key driving forces. On this basis, this article further elaborates on how innovation diffusion promotes the improvement of economic efficiency, structural optimization, and environmental improvement, thereby achieving a comprehensive improvement in the quality of economic growth. In addition, this article also proposes effective paths and strategies for implementing innovation diffusion driven mechanisms, including strengthening policy guidance, optimizing market mechanisms, and creating a social and cultural environment conducive to innovation, providing specific guidance for improving the quality of economic growth.*

Keywords: *Quality of economic growth; Innovation diffusion; Driving mechanism; Efficiency improvement; Structural optimization*

1. Introduction

In the context of the rapid development of the global economy, the quality of economic growth has gradually received widespread attention. The quality of economic growth is not only related to the economic strength and competitiveness of a country or region, but also directly related to the sustainability of its long-term development and the substantial improvement of people's well-being. On this basis, further exploring the internal mechanism of the quality of economic growth is the key to promote the healthy and efficient development of economy. In the process of promoting economic development, innovation is an important driving force and plays an irreplaceable role in improving the quality of economic growth. With the rapid progress of science and technology and the rise of global knowledge economy, innovation has become the biggest driving force for a country's development [1]. Technological innovation can promote the upgrading of industrial structure and the improvement of production efficiency, while institutional innovation can realize the optimal allocation of factors and maximize the role of the economy. However, the value of innovation lies not only in its generation, but also in how it is effectively diffused and applied. The innovation diffusion mechanism refers to the process of spreading, applying, and promoting innovative achievements in the economic and social system, and its efficiency is directly related to the actual effect of innovation and the degree of improvement in the quality of economic growth. Therefore, in-depth research on the driving mechanism of innovation diffusion is of great significance for promoting substantial improvement in the quality of economic growth. This article aims to comprehensively and systematically explore the innovation diffusion driving mechanism of economic growth quality. Through in-depth analysis of how the innovation diffusion mechanism promotes the improvement of economic growth efficiency, industrial structure optimization, and ecological environment improvement, the key role of innovation diffusion in improving the quality of economic growth is revealed. Meanwhile, this article will also explore how to effectively operate the innovation diffusion driven mechanism, including how the government formulates guiding policies, how the market optimizes mechanisms, and how to create a social and cultural environment conducive to innovation, in order to provide practical theoretical support and policy recommendations for improving the quality of economic growth.

2. Innovation diffusion mechanism and its impact on the quality of economic growth

Innovation diffusion not only covers the application and promotion of technological innovation in

industry, but also includes the in-depth promotion of institutional innovation in economic and social systems. In-depth analysis of innovation diffusion mechanism and how it affects the quality of economic growth can better understand the role of innovation in economic development and provide a solid scientific basis for policy making.

The core of innovation diffusion mechanism lies in the effective dissemination and application of innovation results. In terms of technological innovation, the successful research and development of new technologies is only the first step. What is more important is to transform these technological achievements into actual productive forces, so as to promote industrial upgrading and sustainable economic development [2]. This requires the establishment of an efficient technology transfer and diffusion mechanism, including strengthening the construction of technology markets, and promoting technical cooperation and exchange. At the same time, institutional innovation also needs an effective diffusion mechanism to ensure its wide application in real economic life. This involves the popularization of policy publicity, the in-depth implementation of laws and regulations, and the strengthening of social supervision to ensure that institutional innovation can be deeply rooted in people's hearts and produce actual economic benefits.

The impact of innovation diffusion mechanism on the quality of economic growth is manifested in multiple aspects: (1) Innovation diffusion can improve the efficiency of economic growth. By introducing new processes and methods, enterprises can optimize the production process, improve production efficiency, reduce costs, and enhance market competitiveness. Through institutional innovation, China's economic management system can be optimized, transaction costs of the system can be reduced, resource allocation efficiency can be improved, and thus promote China's economic development; (2) The diffusion of innovation is conducive to promoting structural adjustment of China's economic development. Technological innovation can promote the improvement of industrial structure and the rise of emerging industries, thereby achieving a transformation of traditional industries. Through institutional innovation, capital can be allocated to more efficient areas, promoting the optimization and upgrading of China's economic structure. Innovation diffusion can also improve the economic growth environment and enhance the sustainability of economic development. By promoting green technology innovation and environmental protection system innovation, energy consumption can be reduced, environmental pollution can be reduced, and the harmonious development of economy, society, and environment can be achieved.

However, the implementation of innovation diffusion mechanisms is not an easy task and requires the joint efforts of the government, enterprises, and all sectors of society. As shown in Figure 1.

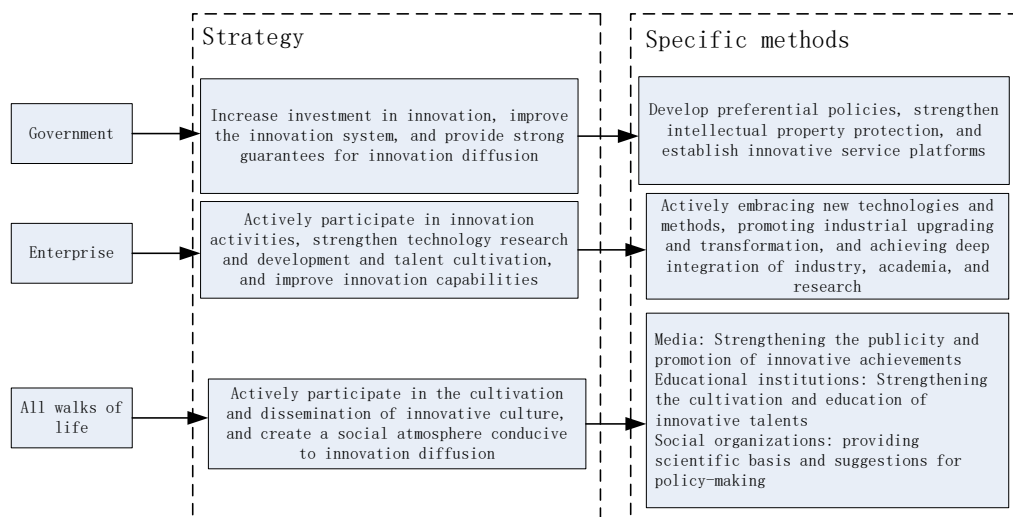


Figure 1: Implementation strategy of innovation diffusion mechanism

As can be seen from Figure 1, the state should increase investment in innovation, improve innovation system, and provide a strong guarantee for innovation diffusion. Enterprises should actively participate in innovation activities, strengthen technology research and development and personnel training, and improve the ability of independent innovation. All sectors of society should also actively participate in the cultivation and dissemination of innovation culture, and create a social atmosphere conducive to the diffusion of innovation. In specific implementation, the government can promote innovation diffusion by formulating preferential policies, strengthening intellectual property protection,

and establishing innovation service platforms [3]. For example, government agencies and universities have set up scientific and technological innovation funds to support enterprises in technological research and development and the transformation of achievements. The state strengthens the protection of intellectual property rights, thus protecting the legitimate rights and interests of innovators in laws and regulations; Government agencies have set up a "one-stop" service platform for the transformation of scientific and technological achievements and consultation and cooperation. In addition, the government should also strengthen the docking and cooperation with international innovation resources, actively introduce foreign advanced production processes and management models, and promote the improvement of China's independent innovation level.

As the main body of innovation diffusion, enterprises should actively embrace new technologies and methods, and promote industrial upgrading and transformation. Enterprises strengthen cooperation and exchanges with institutions of higher learning, research institutes and other research institutions to promote the in-depth development of production, education and research. At the same time, we should attach importance to talent cultivation and team building, and establish a high-quality talent with creativity and practical operation.

Media, educational institutions, and social organizations should also play an active role in innovation diffusion. The media should strengthen the promotion and dissemination of innovative achievements, and increase public awareness and participation in innovation; Educational institutions should strengthen the cultivation and education of innovative talents, and provide a continuous stream of talent support for innovation diffusion; Social organizations and research institutions should actively carry out innovative research and evaluation work, providing scientific basis and suggestions for policy-making. Through joint efforts from all parties, the effective implementation of innovation diffusion mechanisms can be promoted, injecting strong impetus into the improvement of economic growth quality.

3. Implementation path and strategy of innovation diffusion driving mechanism

3.1 Synergy between government policy and innovation diffusion

Governments play a key role in economic and social development, especially in promoting the diffusion and application of innovations. By carefully designing and implementing relevant policies, governments can effectively promote the transformation of innovation results, thereby improving the quality of economic growth. The synergy between government policy and innovation diffusion is shown in Table 1.

Table 1: Synergy between government policies and innovation diffusion

Government role and action	Policies and measures	Impact and effect
Guidance and motivation	Develop policies for technological innovation and industrial support Provide tax incentives and financial support	Clarified the direction and focus of innovative development Stimulated the enthusiasm of innovative subjects
Coordination and standardization	Establishing innovative service platforms, strengthening industry university research cooperation, and strengthening the protection of intellectual property rights	Promoting the sharing and integration of innovation resources, creating a fair and legal market environment for innovation diffusion
Optimize the innovation environment	Strengthen infrastructure construction, improve innovation service system, and cultivate innovative talents	Reduce innovation risks, improve innovation efficiency, and promote the application and popularization of innovation results

As shown in Table 1, government policies play an important role in guiding and motivating innovation diffusion. Through the formulation of policies such as scientific and technological innovation and industrial support policies, the government has clarified the direction and focus of innovation development and guided the flow of enterprises and capital to the innovation field. At the same time, the government has also reduced the cost of innovation by providing tax incentives and financial support, and stimulated the enthusiasm and participation of innovation entities. These policies provide a strong institutional guarantee for the diffusion of innovation.

Government policy plays a coordinating and regulating role in innovation diffusion. The diffusion of innovation involves multiple subjects and links, which requires the government to carry out overall coordination and standardized management. By establishing an innovation service platform and strengthening industry-university-research cooperation, the government has realized the sharing and integration of innovation resources and accelerated the transformation and application of innovation achievements. At the same time, the government has strengthened the protection of intellectual property rights, cracked down on infringement, and created a fair and law-based market environment for the diffusion of innovation.

The government promotes the in-depth development of innovation diffusion by optimizing the innovation ecosystem. This includes strengthening infrastructure construction, improving the innovation service system, and cultivating innovative talents. These measures help to reduce innovation risks, improve innovation efficiency, and promote the application and promotion of innovative achievements on a larger scale.

3.2 Interaction between market mechanism and innovation diffusion

Market mechanism plays a vital role in the process of innovation diffusion, and forms a close and dynamic interaction relationship with innovation diffusion. Innovation diffusion is not only a simple transfer of technology or knowledge, but also a process of maximizing the value of innovation through competition and cooperation driven by the market mechanism.

The market mechanism provides the driving force for innovation diffusion. In the face of increasing market competition, enterprises will take the initiative to find and adopt new technologies to gain a larger market share. This market demand has led to a rapid increase in the speed and scope of innovation diffusion, thus accelerating the transformation of innovation results into real-world productivity. At the same time, the price mechanism in the market mechanism also plays a key role, through the transmission of price signals, to guide the rational allocation of innovation resources in the market, so as to promote the efficient use of innovation results.

On the contrary, innovation diffusion has enabled the market system to better function. With the emergence of new technologies, products, and businesses, the supply of China's consumer market is increasing day by day, and the structure and characteristics of market demand have also undergone profound changes. This prompts market entities to continuously adapt and adjust their strategies, promoting the upgrading and deepening of market competition. At the same time, innovation diffusion also promotes the circulation and sharing of market information, improves market transparency and efficiency, and provides better conditions and foundation for the operation of market mechanisms.

The interaction between market mechanisms and innovation diffusion is also reflected in the construction of an innovation ecosystem. The innovation ecosystem is a complex network composed of multiple innovation entities and elements, in which market mechanisms play an important role in connecting and coordinating. Innovation entities can form effective cooperation and competition relationships, jointly promoting the diffusion and application of innovation achievements. At the same time, market mechanisms can also attract and integrate various innovative resources, providing strong support for the stable operation of the innovation ecosystem.

3.3 Construction of social environment and cultural atmosphere

Social environment is the external condition for innovation diffusion, and a stable, open and inclusive social environment can provide sufficient space for innovation activities. In a stable social environment, coherent policies and sound rule of law provide a solid backing for innovation entities, so that they can safely devote themselves to research and development without worrying about the risks of policy changes. An open social environment encourages cross-border cooperation and knowledge exchange, enabling innovation results to be disseminated and applied more widely across fields and regions. An inclusive social environment can tolerate failure, give innovators enough room for trial and error, and stimulate more innovative vitality.

The cultural atmosphere provides a strong internal driving force for innovation diffusion. A social atmosphere that advocates innovation and knowledge can stimulate the enthusiasm for innovation and promote its emergence. Creating a good cultural atmosphere is a systematic task that requires the joint efforts of the education, media, and art sectors. Education should focus on cultivating students' innovative thinking and practical abilities. The media should actively promote innovative achievements

and spirit, while art can showcase the charm of innovation through its unique expression, guiding the public to form a healthy and positive concept of innovation.

In the process of creating a social environment and cultural atmosphere, the government, enterprises, and all sectors of society should play an active role. The country should formulate corresponding policy measures to create conditions for the innovation of scientific and technological personnel; Enterprises should actively invest in innovative practices to promote technological progress and optimize industrial structure; At the same time, the whole society should contribute to creating a favorable environment that respects and encourages innovation.

It should be noted that the construction of social and cultural atmosphere is a long-term process that requires continuous efforts. In this process, we should adhere to the principle of putting people first, respect the diversity and difference of innovation entities, and promote the formation of a diversified and inclusive innovation ecosystem.

4. Conclusion

The research on the innovation diffusion driving mechanism of economic growth quality is an in-depth exploration of important issues in current economic and social development. Through a comprehensive analysis of the innovation diffusion mechanism and its impact on the quality of economic growth, it is found that innovation diffusion is not only a key and important way to improve economic growth efficiency, optimize economic structure, and improve the economic environment, but also a core driving force for promoting sustained and healthy economic development. With the continuous progress of technology and the deep integration of the global economy, innovation diffusion will play a more important role. In this context, the government, enterprises, and all sectors of society should further strengthen cooperation, improve innovation diffusion mechanisms, and provide strong support for improving the quality of economic growth. The process of innovation diffusion is also accompanied by certain challenges and problems, such as technological barriers, market risks, etc. By formulating scientific and reasonable policy measures, a good external environment is created for innovation diffusion.

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