

Research on Innovation Mechanism of Market-oriented Technology

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Abstract: At the third Plenary session of the 18th CPC Central Committee, our Party clearly proposed to establish and perfect the institutional mechanism to encourage primitive innovation, integrate innovation, introduce digestion and absorb in innovation, perfect the market-oriented mechanism of technological innovation, and give play to the guiding role of the market in the direction of technological research and development, route selection, factor price, and allocation of various innovative elements. The mechanism of technological innovation should be market-oriented, make full use of innovative resources, speed up the path of innovation and realize scientific development.

1. Requirements for Market-Oriented Technological Innovation Mechanisms

The development of enterprises depends on the support of the whole market environment, but also on their own technological strength. In order to realize the innovation and breakthrough of enterprises, enhance the ability of technological innovation, and help enterprises to maintain stable development in the fierce market competition environment, we must take the market as the guide, market demand as the direction of continuous innovation, perfect technological innovation mechanism, grasp the context of market development, take the road of innovative technology, drive the innovation and development of enterprises, and achieve steady profit.

1.1. Improved Market System

The continuous improvement and perfection of market-oriented technological innovation mechanism needs to be based on relatively perfect market system. The market determines the direction of technological innovation and the development path of technological innovation mechanism. Perfect market system and environment determine the direction of enterprise resource allocation.



Figure 1 Market-oriented technological innovation

1.2. Enterprises as the Subject of Technological Innovation

To carry out technological innovation, enterprises should be based on the development trend of

the market, combine the essence and motivation of the enterprise, determine the direction and goal of technological innovation, withdraw from the new products of heterogeneity, and make profits by using the differentiated market structure, so as to help enterprises stand firm in the fierce market competition and maintain a certain competitive advantage. With the continuous development of market economy in China, enterprises have ushered in a new situation of innovation and development, but in the process of continuous development of market economy, the imperfect market economy system and complex market environment have caused the lag of innovation ability and quality of enterprises in China, and increased the difficulty of enterprise transformation and upgrading. Therefore, in order to realize the continuous improvement of market-oriented technological innovation mechanism, enterprises should take the market as the guide, take the enterprise as the main body, allocate all kinds of resources effectively, seek new competitive advantage and market development direction, in order to keep up with the pace of market development and maintain competitive ability.

2. Elements of Market-oriented Technological Innovation Mechanism

2.1. Enterprise as the Implementing Entity

The development of the enterprise is the direct manifestation of the development of the market economy, and the enterprise is the component of the market economy, which assumes the role of providing products and services.[1]. The technological innovation mechanism must take the enterprise as the main body, and embody the actual achievements of the technological innovation mechanism by analyzing the proportion of the enterprise in the dimensions of R & D input, output and commercialization, at the same time, the essence and motivation of the enterprise also determine its main role as the technological innovation mechanism. The market-oriented technological innovation mechanism should always take the enterprise as the main body, and always embody its subjectivity from the aspects of innovation decision-making, research and development of innovative products and services, investment, income distribution and risk-taking. In the process of establishing and perfecting the market-oriented technological innovation mechanism, three key issues should always be grasped: first, the starting point and purpose of technological innovation; second, the income or profit point that enterprises can obtain through technological innovation; and third, the necessary conditions for technological innovation. Only by making clear the above three problems, can we carry on the technological innovation and the continuous improvement of the mechanism based on the market.

The starting point and purpose of technological innovation of enterprises should be to obtain long-term and stable stress ability and enhance the advantage of market competition, which determines that enterprises need to take the market as the guide, obtain new profit growth point continuously through technological innovation, in order to realize the improvement of profitability by creating technology, technology, products and services, ensure the steady growth of enterprise profits and stabilize the market position.

The profit or profit point that the enterprise can obtain through the technological innovation determines the direction and result of the technological innovation of the enterprise. Through the continuous improvement of the existing technology, seeking a breakthrough, changing the monopoly trend formed by the original market conditions, and obtaining a premium profit through the creation of new products or new technologies, the innovation income of the enterprise is formed.

The necessary conditions for enterprises to carry out technological innovation are the prerequisite and guarantee for enterprises to carry out technological innovation in the market environment, including the appropriate social environment and production and management environment, the resources that can be used for technological innovation, the perfect innovation system, the sound talent training and incentive system, etc.



Figure 2 Technology support and innovation

To sum up, as the main body of market-oriented technological innovation mechanism, enterprises should make clear the target market or potential market for technological innovation, select technology with advantages and competitiveness, formulate corresponding perfect market strategic plan, match corresponding investment, integrate enterprise resources to a certain extent, establish perfect organizational structure, so as to help enterprises achieve continuous innovation ability, and obtain profit through technological innovation mechanism to enhance economic benefits.

2.2. Market-based Resource Allocation

The resource allocation mode of market-oriented technological innovation mainly includes two kinds, one is planned economy, the other is market economy. For a long time in our country, the government has dominated the market development and decided the main direction of innovation resource allocation. This government decision-oriented market development direction has some drawbacks in the actual process. Because the government can not control the trend of economic development, it can not determine the real-time trend of technological innovation. Technological innovation can not provide practical support for the production and operation of enterprises, and market innovation is inefficient and can not meet the actual needs of enterprises. With the continuous development of market economy, the market level of our country is becoming more and more mature, the system of market economy is becoming more and more perfect, and the whole market environment tends to be formalized, which makes the allocation direction of innovation resources gradually match with the actual demand of the market, and provides the possibility for the continuous improvement of enterprise innovation mechanism.

Technological innovation needs to be supported by sufficient funds, manpower, material resources, data and information, but innovation resources have certain particularity, and the matching of innovation resources may have a certain lag in the actual operation, which increases the difficulty of the market in determining the allocation of technological innovation resources. Therefore, the market-oriented technological innovation mechanism requires enterprises to follow the law of market development, strengthen the market-oriented operation of innovative resources with the help of perfect market environment and continuously optimized system, and realize the marketization of technological innovation, scientific research funds, scientific research work and transformation of technological achievements.



Figure 3 Science, technology and innovation

2.3. Government as Regulatory Coordinating Body

The mechanism of market-oriented technological innovation is based on the enterprise as the main body, the market as the direction of resource allocation, and also needs to make full use of the power of the government. Technological innovation can not be completely divorced from the government's intervention, and the government plays a supporting and assisting role in the market-oriented technological innovation; Market-oriented technological innovation mechanism needs the government's courage, on the one hand, because technological innovation needs advanced, timely and equal information as the support, and relying on market-oriented technology innovation alone is likely to cause technological innovation in the actual operation due to information asymmetry and weakening of the role of the market, coupled with technological innovation needs a large amount of capital, technology as the support, high risk and resource input or gain has a certain lag, if only rely on market regulation, difficult and can not achieve the allocation of resources. On the other hand, because technological innovation is not only related to the development of enterprises, market development, but also determines a country's comprehensive national strength and competitive position in the world, which is far higher than the strategic value of enterprises and markets.[2]. Based on this, the market-oriented technological innovation mechanism should take the government as the regulatory coordinating department, make full use of government resources, transform government functions, position government's role in market-oriented technological innovation from direct intervention to indirect guidance and support, encourage the continuous transformation of enterprise innovation achievements through policy, capital, technology and talent support, provide a good innovation environment for enterprises, open up certain policies, give full play to the role of government departments in guiding, supporting and serving technological innovation, and give full support to enterprises. To help enterprises grasp the direction and lifeblood of technological innovation, eliminate illegal enterprises and bad enterprises in the path of technological innovation, maintain the market environment, and ensure the road of technological innovation of enterprises.

3. Conclusion

To continuously improve the market-oriented technological innovation mechanism, we should pay full attention to and coordinate the relationship between enterprises, markets and governments, take enterprises as the main body of technological innovation, take the market as the direction of the allocation of innovative resources, at the same time give full play to the role of the government, change the traditional and backward technological innovation mechanism, create a good innovation environment, establish a stable and fair market order, and clear the obstacles and help for the technological innovation road of enterprises.

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