

Research on Constraints and Countermeasures of High-tech Industry Development

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Abstract: The high-tech industry is a strategic commanding point of the world powers, which is directly connected with the competitiveness of a country and its position in the world economy and politics. By analyzing the outstanding situation of environment development and management of China's high-tech industries and poor performance, the paper discusses the factors that restrict the development of China's high-tech industries, including investment, risk factors, innovation system constraints and talents, finally, it puts forward some countermeasures to promote the development of high-tech industry in China.

1. Introduction

The industrialization of high and new technology is a complex socio-economic phenomenon [1]. Operation must go through several interrelated and interacting stages, and it must be influenced and restricted by many external and internal factors. The fundamental point of developing high and new technology lies in the industrialization and the formation of high and new technology industry, which produces huge economic and social benefits. Of course, this is a complex and progressive process, which requires coordination and support from many aspects. For example, if we want to ensure that we can ensure that industrialization is carried out smoothly, we must transform our research results from system, law, policy, funds and talents. At present, the innovation consciousness of Chinese enterprises is increasing, and the awareness of intellectual property protection has been greatly improved. No government must establish and improve the policy system for high technology industrialization, accelerate regional carrier and base construction of high-tech industrialization, create favorable conditions for the industrialization of high technology, but also the development of China's high-tech industry is still in the infant stage, there are many restricting factors. The policy system conducive to the development of high and new technology industry has been preliminarily formed. The State Council departments and local governments to take active measures to implement the policies of the central government, and according to the new situation and new problems in the practice of creative work, formulated a series of policies to promote high-tech development at present, the relevant departments under the State Council on the implementation of the central government decided to introduce the policy of more than 40, a series of policies and measures of the central and local governments, covering almost the whole process of the transformation of technological innovation and achievements, initially formed a policy system for the development of high-tech industries. With the rapid development of the private venture capital market, many scientific and technological firm and investment funds have emerged, with a total amount of more than 100 billion yuan [2].

2. Constraints of High-tech Industry Development

2.1 Imperfect Policy Measures

Although China has established a policy to promote the development of high-tech industry, but some policy procedures in the implementation of the complex, long cycle, is not conducive to the

implementation of the national policy on job-related technology pricing stock, in the implementation are complex and time-consuming. Make some technical results. The layers of approval lost in some areas good business opportunities in the implementation of the policy of non-state-owned enterprises cannot be treated equally, as some local company reorganization in the collective enterprises of science and technology, requirements will be granted by the state tax relief funds into state-owned shares, and to participate in the enterprise management and income distribution policies lack of supporting measures such as operation of the central clear to high-tech products for VAT tax support, but in addition to the software and integrated circuit, has not yet been implemented for other high-tech products supporting measures. In addition, there are more specific and specific policy provisions on scientific and technological intermediary service institutions, scientific and technological risk investment and risk guarantee. The transformation of high-tech achievements mainly depends on incubators. At present, there are hundreds of large incubators in China, with millions of square meters of hatchery and tens of thousands of incubators. The number of hatch makers is second only to the US. The incubator, is a comprehensive science and technology business incubator. Its representative is the business service center; two is the professional technology business incubator, which serves mainly for specific technology entrepreneurs, existing software, integrated circuit design, new materials, bio medicine, photoelectric information and a number of professional incubator started operation; three is the incubator for specific business groups, including the provision of business services for university teachers and students of University Science and Technology Park, students Pioneering Park to provide business services for the country to study personnel, to provide business services for enterprise employees [3].

2.2 Insufficient Innovation Ability

In the process of industrialization, the contradiction between supply and demand of scientific and technological achievements is very prominent. Projects with high technology level, good market prospects and independent intellectual property rights are hard to find. Lots of venture capital are idle because they cannot find good projects. The lack of technological innovation and the lack of technological potential has become a major problem affecting the sustainable development of China's high-tech industry. There are hundreds of millions of capitals hovering outside the high-tech enterprises. From the current actual situation of venture capital and high tech enterprise, venture capital, venture capitalists and venture enterprise, venture entrepreneurs themselves have some problems, which requires the market to change; China exists in the soft investment environment problem has seriously affected the enthusiasm of investment risk, mainly in the investment supervision system, the financial intermediary service system and venture capital withdraw channels serious problems, especially the return channel is narrow, the investment risk is difficult to socialization, which seriously affected the enthusiasm of venture investment. After several research and development personnel in the United States, Russia, Japan, Germany, the forefront of third, but two indicators qualified engineers and senior management personnel are in the end. This reflects the serious situation of the poor quality of our talent team and the serious lack of innovative talents. In the process of management and utilization of innovative talents in China, due to the competition mechanism has not yet been introduced, the talents with potential innovation are being buried. The phenomenon of emergence of innovative talents and the outflow of innovative talents are emerging. The R & D investment intensity of high-tech industry is obviously insufficient. The source of funds is too dependent on corporate funds. There is a lack of government funding guidance policy and financial institutions' participation is not high. The amount of science and technology expenditure can not only effectively attract relevant technical personnel, but also lead to the inability of many scientific and technological achievements [4].

2.3 Backward Risk Investment

T Venture capital is a key step to promote the industrialization of high and new technology. However, the system and mechanism of venture capital in China are far from being formed, resulting in the lack of venture capital and the combination of technology and risk capital. The main

performance is: one is the construction of the relevant national laws and regulations and guidance to support the policy lag; the two is the risk of financing channels, a lot of private capital to enter the market of venture capital and venture capital; three is closely related to the intermediary service system has not been formed, the lack of professional service institutions and personnel; four is the gem the market has long been looking forward to the society has not yet been established, the lack of exit mechanism of venture capital market. From the current domestic already established risk investment institutions source, in addition to foreign investment institutions, the majority is taking the government as the main contributor or is founded under the guidance of the government, private, private capital almost no, this development model of government leading venture capital investment not only does not conform to the nature of risk investment itself, not conducive to the introduction of innovation, incentive and competitive spirit, but also restricts China's venture capital funds source. In addition, the scale of the fund is obviously small and cannot reach the goal of dispersing risk and setting up the portfolio. Venture capital is based on high-tech enterprises as an investment object, relying on equity participation in business management, and capital gains through equity transfer, through board members to participate in major business decisions to control risks and reduce uncertainty to improve the safety of funds. Venture capitalists do not pay much attention to the dividend return of equity. They value the investment of their listed companies or get a substantial return on equity transfer through mergers and acquisitions. This business process can only be built in a strict and standardized operation framework, and a healthy capital circulation and value-added system can be built between venture capital and venture enterprises.

3. Countermeasures of High-tech Industry Development

3.1 Perfect Policy Measures

To better promote the development of high and new technology industry, we should make the preferential tax policies consistent with the government's science and technology development plan, encourage development and investment, guide and encourage enterprises to invest in technology development, and actively apply high and new technology to production. At the same time to improve collection efficiency, reduce procedures, reduce the cost of corporate tax, the relaxation of macro financial policy, strengthen technological innovation and the development of human capital investment funds, improve capital allocation efficiency of micro, improve industry financial investment environment development and overseas investment projects promulgated priority, the focus is on developing, and guide capital flows through the customs, foreign exchange, loans and other means, combined with the restructuring of the domestic industrial structure. One is in the development of high-tech industrial development policy, scientific analysis and understanding of the world science and technology development trend, and the strategic steps of China's national economic and social development, formulate policies and measures for dealing with the relationship between the stability and change of good policies should take into account the current industry development status and long-term goals, so that the policy is in accordance with the long-term planning of the national industrial development. Two, the content of the policy must be clear and specific, and the operation procedure of the policy is simple and easy. International economic information is of vital importance to high-tech enterprises in international business decision-making, the state should organize the specialized agencies, with the powerful strength advantage for high-tech enterprises to provide comprehensive and reliable information service the government should focus on a group of experts, research on the investment environment of foreign countries, open up various channels to collect international information, understand the national policy, the level of development and the foreign exchange business and the tax system, through the analysis of qualitative and quantitative screening of true and valuable information, and integrated system of government and the organization should also provide credit to the high-tech enterprises of advisory services, help the high-tech enterprises to make the right decisions in terms of development, business risk and loss to minimum.

3.2 Strengthen Talent Training

We should strengthen the organic combination of scientific and technological innovation and personnel training and encourage research institutes to cooperate with institutions of higher learning to cultivate research talents. To cultivate their interest in exploration and the spirit of Science in the practice of innovation. Colleges and universities should adapt to the development of national science and technology strategy and market demand for innovative talents, timely and reasonable to set some interdisciplinary and emerging discipline and specialty structure adjustment and inspire innovative thinking, active academic atmosphere, efforts to form a harmonious and healthy cultural atmosphere of innovation. High tech enterprises should increase the employment of high level talents and cultivate excellent talents of science and technology efforts, the implementation of a variety of options, including the management and technical backbone of the backbone of incentive policies, explore the concrete methods of establishing knowledge, technology, management and other factors participate in the distribution of the recruitment and placement of foreign scientists and engineers to attract and recruit foreign scientists and engineers. We should establish and improve the use and incentive mechanism of talents and retain and use high-level talents. The system of talent management and incentive is set up with the core of competition, which is beneficial to the industrialization of high and new technology. We should take the reform being implemented by institutions as an opportunity to establish a competitive mechanism of selecting talents and using talents, and greatly improve the proportion of innovative talents in scientific and technological personnel. During the development process of high-tech enterprises, the owner of the enterprise as the principal and agent between operators, technicians in the information distribution has great asymmetry, both in terms of interests and responsibilities of the uneven distribution, very likely to operate the enterprise staff. How to change the operator and the technical backbone of the concept, the cost of the enterprise through the pursuit of personal income maximum, to take the profit maximization to achieve personal income maximization on the way of thinking, is the main question facing many high-tech enterprises of the problem. The enterprise can be realized through the benefit Commission, the annual salary system, stock options and other forms, the stock option system in western countries has proved to be an extremely effective incentive system to unify and constraint, its existence is also suitable for the enterprises in our country, although there are some obstacles on the design of the system, but it in the enterprise of our country implementation is represent the general trend.

3.3 Improve Risk Investment

High tech and venture capital are closely related, the government should vigorously support large enterprises and high-tech enterprises to participate in the risk investment, relaxation of insurance funds, trust and investment institutions, pension funds, endowments and other institutional investors intermediary risk capital operation, through the mobilization of civil idle funds to invest in high-tech industry. While expanding the sources of venture capital, we should optimize the structure of venture investors and improve the exit mechanism of venture capital and develop and perfect the property right market combined with the actual situation of China. High tech venture capital is mainly to solve the problem of shortage of funds early development of high-tech venture enterprise, product or service into maturity, enterprise growth rate, the venture capital must be based on the transfer of shares by way of realized gains in capital increase, to seek new investments or other compensation failed investment losses, this is the key of high tech risk the operation of investment. When venture capitalists find that the investment prospects are poor or the investment is wrong, to avoid greater losses will also require the withdrawal of capital as soon as possible. The further development of high-tech venture enterprises also requires timely withdrawal of venture capital. The reason is that diversification of venture capital and investment and operation principles limit the scale of single investment and cannot meet the capital requirement of further expansion and continuous innovation of venture enterprises. The open equity capital market, the private equity capital market, the repurchase of risk enterprises or their original shareholders and the repurchase of risk managers or

employees are the main channels for the exit of hi-tech venture capital. The public capital market is directly facing the public offering market, such as securities motherboard market, second board market, the OTC market; Unpublic equity capital market is not required by the securities regulatory authorities for approval and registration, capital market transactions between the investors rights and interests.

4. Conclusions

According to the actual situation in our country, the main direction and focus we must be clear for a long time in the future development of China's high-tech industry, on the one hand to promote the traditional industry with high technology and promote the upgrading of traditional industries; on the other hand, to seize the opportune moment to accelerate the development of high-tech industry has a large market demand and good prospects. Thus, to promote the rise of new industries, high-tech industry development path out of a Chinese characteristic.

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