Research on Financial Innovation Path of Technology-based SMEs

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Abstract: In order to solve the problem of financing difficulty of science and technology SMEs, many cities are actively exploring the financing mode of science and technology SMEs and innovating the service system of science and technology enterprises under the promotion of the government. The most important issue for the survival and development of small and medium-sized technological enterprises is capital. The lack of funds has seriously restricted the healthy development of science and technology SMEs in China. Find the control of risk loopholes and the solution of high-risk behavior, in order to improve the initiative of the main bodies of scientific and technological financial activities, and promote their continuous expansion, to solve the financing difficulties of high-tech SMEs. The function of financial optimization resource allocation provides technology-based SMEs with the funds needed for technological innovation and promotes the deep integration of technology and finance. Through the research on the financial innovation service of SMEs, exploring new financing methods, exploring new financing channels, and broadening the financing space of SMEs, it has important practical significance for improving the financial service level of SMEs in China.

1. Introduction

Innovation is the key to economic adjustment and transformation. By improving the ability of scientific and technological innovation, promoting the transformation of scientific and technological achievements, fostering more vigorous scientific and technological enterprises, we can inject new vitality into economic development [1]. In order to meet its capital needs in various stages of technological innovation, it is necessary to innovate financial services from the perspective of financial institutions, financial service intermediaries and the government, and to build a financial service system matching technological SMEs [2]. Technology-based SMEs are facing higher risks of technological innovation than the general SMEs. The change of government's macroeconomic policy will bring risks in financing channels and tax revenue to small and medium-sized technology-based enterprises [3]. The technical risks have been basically released, and the market risks and management risks have been greatly reduced. Many companies have issued new shares at this stage for direct financing, and the reputation of listed companies has increased greatly. It is easier to borrow from banks [4]. The development of science and technology innovation also needs financial security to explain the mutual promotion of financial and technological innovation. Therefore, to build an innovative country, the core is to enhance the capacity of independent innovation as the strategic basis for the development of science and technology, and promote the effective innovation of science and technology and finance Combining and symbiotic value added [5].

The fundamental reason of financial innovation is the self-defensive behavior of financial institutions in order to get rid of various financial constraints inside and outside. Among them, external constraints refer to various controls and constraints from the regulatory authorities, while internal constraints refer to various management indicators within financial institutions [6]. Financial system has great advantages in many aspects, such as agent monitoring, information processing, selection, price discovery, resource allocation, investment and financing, so it can effectively solve the difficulties encountered in independent innovation [7]. It plays a significant role in stimulating national economic growth, promoting user consumption, optimizing resource allocation and stimulating innovation potential and entrepreneurial vitality of the whole society.

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However, with the deepening of technological and financial innovation, the high-risk carrying of technological SMEs will inevitably lead to the great test of financial institutions, technological enterprises and guarantee institutions in the process of the integration of technological and financial innovation [8]. The contradiction between the supply of funds and the needs of corporate funds has been alleviated. However, because the technology-based SMEs have the characteristics of rapid growth, their capital demand will grow faster than the supply of funds, which will once again create contradictions. The contradiction between this kind of capital supply and corporate capital demand is the embodiment of the inherent regularity of continuous innovation of SMEs [9]. To fundamentally solve the problem of financing difficulties, we must promote the combination of financial resources and technological innovation, and play the complementary role of finance and science and technology. This paper has carried out research on the financial innovation path of technology-based SMEs [10].

2. Materials and Methods

2.1. Financing status of technology-based small and medium-sized enterprises

Venture capital is developed with the rise of high-tech industry, and it plays an important role in promoting the entrepreneurship of high-tech enterprises in Western countries. The supporting service quality of science and technology finance has a serious impact on the promotion of science and technology finance. At present, the small and medium-sized enterprises of science and technology are mixed and can not distinguish between good and bad enterprises. It is necessary to establish a credit evaluation system and a disciplinary mechanism for dishonesty. Technology-based SMEs have grown into stable cash flow enterprises. On the basis of stable market share and cash flow, the financing ability of technology-based SMEs reaches the strongest period in their life cycle. Countries and regions have relatively mature credit guarantee and re-guarantee systems for SMEs. While helping enterprises to obtain financial support, they also disperse the operational risks of financial institutions and make the whole financial service system run continuously and healthily. The internal rules and regulations are not perfect, the business processes are not perfect, the risk measurement is unscientific, and there is no effective risk identification, assessment, control and prevention capabilities. The capital accumulation of enterprises themselves is endogenous financing. SMEs often have very limited accumulation capacity. Most of them have great dependence on foreign financing. However, due to their own conditions, it is difficult to publicly issue corporate bonds and other stocks. Therefore, it can only rely too much on indirect financing.

2.2. Financial innovation service system of small and medium-sized technological enterprises

The imperfect development of capital market leads to the very difficult financing situation faced by small and medium-sized enterprises of science and technology. Owned capital and bank loans are the main sources of capital for enterprises' independent innovation in China, and they do not fully play the role of capital market. Relevant government departments will exert influence on some projects, or will hand in some bad projects to the financing guarantee institutions, which will lead to the financing guarantee institutions can not independently judge and evaluate the financing projects, thus bringing potential risks to the financing guarantee institutions in the process of operation. After the development of industry or department, the role of supply-oriented model will be greatly weakened, and demand-oriented model will take the leading role. The dominant role of the economic and financial innovation development model alternates, depending more on the stage of economic development. Establishing a multi-level capital market, establishing a transfer and delisting mechanism between different levels of capital markets, and paying full attention to the role of venture capital is also the key to the success of the technology-based SME financial service system. Expand loan financing model, establish multi-level capital market, carry out technology insurance pilot, set up technology sub-branches, and build a technology financial service platform.

In order to better meet the financing needs of technology-based SMEs, it is necessary to further improve the capital market construction and establish a multi-level capital market system. The

financing system does not match the characteristics of SMEs'life cycle financing, and the process of growth and growth of technology-based SMEs is difficult. China's capital market started late and the initial reform was not complete. There were deep-seated structural and institutional problems, which restricted the effective play of the financing function of capital market. All kinds of small and medium-sized financial service institutions positioned in the small and medium-sized technology-based enterprises also emerged in the spring after the rains. These financial institutions, which take the small and medium-sized technology-based enterprises as service objects, have different scales, different business priorities and different service modes, and together constitute a diversified financial innovation service system for the small and medium-sized technology-based enterprises. The financial service innovation system for SMEs is shown in Figure 1. Developmental financial institutions participate in economic operations with national credit, and become the mainstay of market vitality with their own market performance, promote credit construction and the improvement of various systems, make up for the defects of existing systems and systems, and solve the problems caused by market failures.

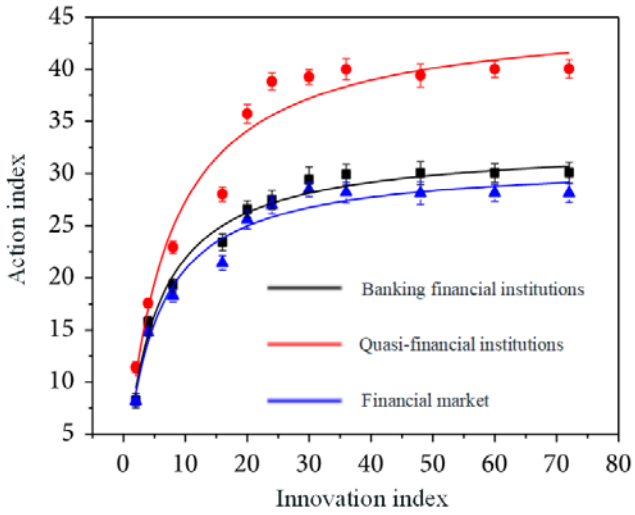

Fig.1. Financial innovation service system of small and medium-sized technological enterprises

3. Result Analysis and Discussion

3.1. Supporting forms for the development of small and medium-sized technological enterprises

In order to actively promote the self-innovation of financial institutions, banks should devote themselves to the ever-increasing reform of their financial system so as to establish small and medium-sized banking financial institutions suitable for the development of small and medium-sized technological enterprises, and vigorously develop specialized commercial banks of science and technology. There are legal risks between guarantee institutions, small and medium-sized technological enterprises and banks. If banks do not take risks proportionally with guarantee institutions, they will impose some unreasonable and unfair requirements on guarantee institutions, which will also increase the risk of guarantee institutions. At the same time, governments at all levels also have strong organizational and coordination advantages and form a strong financing driver. The Development Bank will jointly build a technology investment and financing platform by strengthening cooperation with the Ministry of Science and Technology, the Ministry of Information Industry and the National Defense Science and Technology Commission. Financial services cover all stages of growth of technology-based SMEs, especially in the early stages. In addition to tailoring various financial services products for SMEs to solve their financing problems, many commercial banks have also launched comprehensive financial services for the needs of enterprises.

3.2. An effective way of financial support system for technological small and medium-sized enterprises

The high risk of SMEs is mainly due to their own characteristics and information asymmetry. Small and medium-sized enterprises have the characteristics of high growth, high risk, intangible assets higher than physical assets. Improve the enterprise financial system and internal control system. Make enterprises realize financial transparency under effective management, and supervise and encourage the healthy development of enterprises, thereby weakening the adverse selection and moral hazard caused by information asymmetry. In order to help small and medium-sized technological enterprises solve the problem of financing, some pilot cities in China have adopted such financing modes as unified lending and repayment, collective loans and collective bills. In terms of financial services for small and medium-sized enterprises in science and technology, the Export-Import Bank of China has also made a lot of efforts to provide financing support for such enterprises, and to provide investment advice and strategic planning for enterprises through their own experience in internationalization. Consultation services in terms of aspects. At a higher level, the combination of development banking advantages and government organizational advantages will be combined to strengthen industrial planning, regional planning and urban planning, including the formulation of basic frameworks and ideas for systems and financing, and improve service quality.

Science and technology finance is not unchanged, but is always in the process of development, which requires talents of science and technology finance to continuously innovate science and technology financial products and business according to the needs of science and technology innovation in reality. With the opening of the financial field, China's capital market has developed rapidly, but its service capacity to science and technology-based SMEs is still limited. The multi-level capital market will be established, which will play an effective role in promoting the independent innovation of enterprises, vigorously promote the development of the GEM market, and actively reduce the profitability of enterprises and historical operating performance. Hard target requirements. Enhance their enthusiasm and initiative to carry out scientific and technological financial innovation. And through policy-oriented play the guiding role of government funds. From a hierarchical perspective, the government's science and technology support funds are relatively limited; the social function of the organization's credit enhancement is positioned to build a new basic platform and pillar for the market economy to allocate resources, thereby realizing the will of the government, and signing a financial cooperation agreement with the local government. Co-construction of credit, loan support, commitment to repayment sources and methods. The development of regional equity capital market and the establishment of market provide an effective exit channel for venture capital investment, which has a positive effect on promoting equity transaction and financing of technology-based small and medium-sized enterprises.

4. Conclusion

This paper studies the path of financial innovation of small and medium-sized technology-based enterprises. Improve the knowledge level and business level of SMEs'science and technology finance practitioners, and stimulate innovative consciousness. To attract high-level talents, we should provide favorable development environment, clear development plan and other preferential policies. Guarantee companies need to increase the guarantee services for small and medium-sized technological enterprises and reduce the premiums. Assessment agencies should enhance their business level to improve their ability to serve small and medium-sized technological enterprises. In order to provide good insurance support to enterprises with independent innovation, specific development of insurance products suitable for enterprises'independent innovation should be carried out. Establishing a reasonable transfer and delisting mechanism between different levels and sectors of the market is the key to connecting all levels of markets and establishing an efficient capital market. In the development process of development-oriented financial technology-based SMEs, the government should give full play to its own strength, through public opinion supervision and value

judgment, all relevant functional departments work together to establish a good credit environment and financial security zone. Strengthening the system environment construction includes the improvement of the social credit system, the promotion of the development of the intermediary service market, and the encouragement of high-level science and technology finance talents. Both contribute to the overall risk reduction and promote the expansion of the technology financial market.

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