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# The Research of Chinese Government in Venture Capital Market

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### **Abstract**

This article first introduces the relevant concepts of risk capital and analyzes the Chinese government's intervention in the venture capital market. This article introduces venture capital and government intervention, the limitations of government intervention, and the role of the Chinese government's needs by analyzing history and existing issues. This paper also gives the theoretical basis and policy recommendations for the development of China's venture capital and the theoretical basis of government intervention. The characteristics of venture capital are summarized, as well as the reasons for government intervention, the restrictions caused by the government intervention in the venture capital market, and the government's excessive intervention issues. The article also looks back on the four stages of the development of China's risk investment and emphasizes the government's role in each stage. Finally, this literature review summarizes the government's intervention form of venture capital, compares government intervention in China and some developed countries, and gives suggestions on future development.

### Keywords

Venture Capital, Chinese Government

### 1. Introduction

Venture capital is a kind of high-risk investment behavior. Its primary purpose is to provide seed capital or initial capital for enterprises with high-growth potential to help these enterprises grow rapidly. The definition of venture capital itself is a bit blurred, and there are different meanings in different circumstances. In the United States, private equity risk capital is a subset of investment capital, which can be used in the early stages of high-potential and high-growth companies. One definition is that any investment inflow of technology and knowledge-

oriented companies producing and managing technical dense products and services are risk capital.

In China, the development of the venture capital industry is relatively late. However, in recent years, with the support of the government and the rapid development of China's economy, venture capital has received more and more attention, showing a rapid growth trend. This article introduces the relevant concepts of venture capital, analyzes the Chinese government's intervention in the venture capital market, and provides a reference basis for policy formulation.

# 2. Introducing Venture Capital and Government Intervention

### 2.1. The Characteristics of Venture Capital

Firstly, venture capital takes high risk and targets high returns. So, the targets of venture capital are the emerging enterprises and programs that carry out high-tech innovations. An emerging enterprise often has nothing but a business plan or an innovation of the technology and services. They do not have fixed assets or capital to guarantee the loans, so it is hard for them to get bank loans or other types of financial support from traditional channels. Typically, venture capital is their only choice of fundraising. Specifically, venture capital targets emerging enterprises with high technology innovativeness and can produce new products and services. It is risky for venture investors to allocate capital to these enterprises, but if these enterprises are successful, the investment returns are also very high.

Secondly, the investment success rate is low. Investors have invested funds into high-tech enterprises and projects without mortgages and guarantees. The limitations of new enterprises and the uncertainty of emerging products cause low success rates. However, the return on investment is higher than that of stocks or bonds. Risk investors are willing to bear high risks.

Thirdly, venture capital is a long-term investment with high risk and low liquidity. There are about five processes in the chain of entrepreneurial investment: project selection, contract signing, and assisting enterprises to establish, manage, and exit. The whole process usually lasts three to five years.

Fourthly, venture capital companies often obtain stock options for emerging enterprises. After the company was successful, the venture capital company sold stocks and cash out. Then, they realized investment returns. From this perspective, the risk investment company is not pursuing short-term profits but long-term high capital income.

### 2.2. Government Intervention in the Venture Capital Market Market

### 2.2.1. The Limitations of the Government in the Market Mechanism

In the operation of venture capital, there is information asymmetry between ordinary investors and investment companies, which may lead to reverse choices and moral risks. Scholars have conducted a wide range of research in this field. They believe that the main mechanisms for solving these problems are reputation, contract, and compensation. The government can only play a limited role in these mechanisms.

In the case of the reputation mechanism, it can inspire and restrain the investing companies and the investors, according to Chan and Thakor, if a thorough meriting system can be established to objectively and justly merit and analyze both the investors' investment outcome and the fund managers, then it helps to solve the problems of adverse selection. Berkvick also advocates this method. Empirical analyses show that a good reputation is helpful for investors to attract capital. Nevertheless, for the "new" venture investors, even if they are very good at investment, cannot attract enough capital from ordinary investors because they do not hold outstanding achievements and reputations. This will influence their investment quality. Sahmlan analyses the relationship between venture investors and ordinary investors using principal-agent theory. He thinks a reasonable compensation mechanism must be established to inspire and restrain the venture investors' activities. A good and effective contract can relate the investors' income and their operating returns. It can also avoid potential moral hazards, such as activities causing investment losses and managing fee increases (Chan, Siegel, & Thakor, 1990).

Gomper and Lerner analyze 419 USA venture enterprises and find that venture investing institutions with better reputations and longer histories prefer the compensation mechanism that links with investment returns. But, other investing institutions with a shorter history, smaller scale, and limited reputation prefer the compensation mechanism of higher regular and fixed fees.

### 2.2.2. Government over Interfering with the Risk Investment Market Brought Problems

In terms of the choice of new enterprises, the government's direct investment institutions may have dual acts—if the manager wants to obtain the greatest profit from venture capital, they can professionally operate venture capital, but these venture capital institutions are government-led. This means these institutions are state-owned, and managers and even investors will be replaced each term. These "government officials" are party members who think more about political results, not economic interests. In order to achieve outstanding political performance, the government's direct investment institutions are mainly inclined to invest in companies that are more likely to be successful. Failure is worse than a successful investment or even no investment. So, government officials are unwilling to bear any risks. These dual behaviors will lead to a low marginal return on government capital.

In terms of resource allocation, the government's direct investment and indirect subsidies can double the distribution of resources. Some venture capital companies and newly established companies can organize political lobbying activities. In addition, the government's direct investment and indirect subsidies are more likely to be treated by these venture capital companies and newly estab-

lished enterprises, and their benefits are enormous. Government officials also have the motivation to allocate government expenses to venture capital companies and newly established enterprises that give them political relationships. Some studies have shown that some companies have obtained too much direct investment and indirect subsidies from the government in various ways (Tirole, 1993).

The US Government Accountability Agency pointed out that in order to obtain financial support from SBIR (small enterprise innovation research), many companies set up special institutions in the Washington Special Economic Zone for investment and financing. Once some companies have obtained funds, they will no longer continue to develop but directly transform them into profits. The government helps new enterprises through government acquisitions. The direction is to support high-tech industries. However, to obtain a procurement report approved by Congress, procurement will be mainly carried out in independent states, leading to resource distribution distortions (GAO, 1992).

### 2.3. The Research of Government Role in the Venture Capital Market

In Western countries, most of the sources of risk capital come from private sectors, not government departments. Research in this field is mainly concentrated on the government intervention model and the government's legal supervision and guarantee.

The government's participation in venture capital is different. The government can intervene directly and indirectly to ensure venture capital. The direct way is to enter the venture capital market. The indirect way is to create and ensure a suitable environment for the development of the government for the development of the venture capital market, including improving the legal system and the formulation of tax policies encouraged. In addition, public capital will not exclude private capital in the venture capital market. The government's direct investment reflects its confidence in the industry and its commitment to long-term continuous investment. Therefore, this direct investment encourages private risk capital. As far as the purpose of public venture investment is concerned, it is a manifestation of the government's will. The government builds a communication platform for venture capitalists and new entrepreneurs by guiding private venture capital and improving other value-added services and infrastructure. Sometimes, the government may invest in technical enterprises and underdeveloped areas to promote technological innovation and economic growth in poor areas (Etzkowitz, 2001; Leleux & Surlemont, 2003).

Many scholars have studied tax policies. They found that changes in tax rates would have a massive impact on venture capital. Changes in tax rates will affect the demand for venture capital. The reduction of tax rates encourages more employees to start their own businesses, which requires more venture capital. In addition, the increase in this demand for venture capital has increased the financing demand for venture capital. Compers and Lerner researched the US ven-

ture capital market, which mainly studied the financing situation of the entire venture capital market and the internal financing of specific companies. They found that the reduction in capital profit margin increases the demand for venture capital (Poterba, 1987; Gompers, 1995; Gompers & Lerner, 1996, 1999, 2001).

Besides the demand aspect, the supply aspect is also affected by the change in tax rates. Through empirical research, Friedman found that the changes in tax policies have a vital effect on the supply of US venture capital amount—the decrease of the investment yield tax rates will vastly boost the supply of venture capital. In addition, the tax rate effects are different in the different stages of venture capital investment. In general, policy effects are more significant at the early stage, but when the venture capital gradually grows mature, the policy-inspiring effectiveness decreases (Friedman, 1989).

Keuschnigg and Nielsen set up an overall balance framework containing traditional and entrepreneurial departments. Considering different wages, capital benefits, total income tax, progressive tax, and investment in enterprises, the impact of tax policies on venture capital activities has been studied (Keuschnigg & Nielsen, 2003).

In addition to tax policies, government legislation will also affect venture capital. The development level of risk investment in a country or region also depends on whether there is perfect protection of investors and laws that reduce legal risks and whether there is market risk to reduce risk investment and increase tax discounts for expected returns. The basic conditions of a regional development risk investment include a comprehensive legislative system, preferential policies, developed securities markets, loose investment policies, and comprehensive audit and accounting regulations. Studies also show that improved legal environments can cultivate and promote the IPO market and risk capital markets (Cumming, Fleming, & Schwienbacher, 2006; Bygrave, 1987; Bygrave & Timmons, 1992).

### 2.4. Summary

In this part, the characteristics of venture capital theory, risk investment, and government intervention have been analyzed. Using relevant classical literature to analyze the reasons and limitations of government intervention, and through research on the domestic and foreign venture capital markets, the government intervention in the negative impact of over-intervention. Related academic interpretations of the concept mentioned in the paper and the subsequent chapters will conduct in-depth discussions on the government's intervention in venture capital.

# 3. The Research of Government's Intervention in Venture Capital

Although the purpose of ordinary investors and venture investment companies

engaged in venture capital activities is to get access to high value-added benefits of venture capital, for SMEs, the venture capital supports the high technology research and development activities of its necessary funds, scientific and technological innovation as well as technological progress has played a catalytic role. The fundamental reasons for government intervention in venture capital are that the venture capital activities hold such positive externalities. In order to overcome the problems in the venture capital market, such as funds shortage from the positive externalities, promotion of the development of venture capital, and promotion of technological innovation and technological progress, the Chinese government has taken direct government investment, government guided funds, government loans, government guarantees and other forms of venture capital investment intervention and support.

### 3.1. Reasons for Government Intervention

There are many reasons for government intervention, such as market failure. But the main reason is the positive external nature of venture capital.

#### 3.1.1. The Positive and External Nature of Venture Capital

For venture capital institutions and venture capitalists, venture capital is mainly for small and medium-sized enterprises with high R&D levels and good market prospects. Small and medium-sized enterprises' R&D activities will lead to technological innovation and promote economic growth. Risk-ventilating institutions and venture capitalists conduct risk activities in order to obtain value-added income. However, their investment activities objectively promoted technological innovation and economic growth. In this case, the private marginal benefits they have received are much lower than social benefits, which means that venture capital shows positive features. The value of corporate positiveness depends on the external nature of the scientific and technological achievements it transformed. The higher the technical level, the greater its positiveness (Stein, 1989).

With venture capital's support, emerging entrepreneurs can transform hightech innovation into new products or services with huge market potential. As a result, new entrepreneurs can get excess profits.

Investment institutions and emerging entrepreneurs assume technical and market risks in research, development, and product transformation. However, the transformed new products, new technologies, and new services are likely to be imitated by other companies. Because imitators do not bear the corresponding technical risks and market risks, the cost is low, which will reduce the price of new products and new services. This plagiarism will increase consumers' benefits, but at the same time, it will also harm the interests of emerging enterprises, leading to the excess profits of emerging enterprises and venture capital institutions quickly disappearing. The private interests that the new enterprises appear are lower than the social interests, and their differences are jointly borne by social counterfeiters and consumers. From this perspective, it is positive.

### 3.1.2. Market Failure Caused by External Nature of the Venture Capital Market

When choosing their own investment and innovative decisions, venture capital institutions and emerging companies will follow the principles of maximizing private interests. Both behaviors are positive, so private income is immediately lower than social income. The investment return level selected by venture capital institutions will be lower than the return on the best social investment; the yield of innovative activities selected by innovation and emerging corporate activities will also be lower than the social benefits of maximizing innovation. The differences between these two interest groups have caused insufficient risk—capital supply to social innovation and venture capital—the root cause of the government's entry into venture capital (Martin & Scott, 2000).

### 3.1.3. The Mechanism of Positive and Externality of the Venture Investment Market

The operating mechanism of venture capital is as follows: ordinary investors provide venture capital, venture capital institutions, and investors conduct actual investment activities—they choose emerging entrepreneurs to invest, bear the high risk, and obtain potential high-risk returns. The purpose of ordinary investors, venture capital institutions, and even new entrepreneurs to invest or innovate activities is to obtain high profits. However, objectively, venture capital has promoted innovation and technology development and is considered the driving force for economic development. In addition, venture capital has a very positive role in upgrading industrial structure, financing small and medium-sized enterprises, creating employment, and improving comprehensive economic competitiveness. In other words, the investment activities of venture capital institutions and the innovative activities of emerging enterprises have brought considerable benefits to society, but the market mechanism has not compensated for these interests. The social and private benefits created by venture capital institutions and emerging entrepreneurs are not matched. This difference is the external nature of venture capital (Lerner, 2002; Stein, 1989).

Technological innovation surpasses simple technological innovation. It includes a series of comprehensive innovations, such as technological innovation, management innovation, financial innovation, and business innovation. Technological innovation has the characteristics of high risk, high investment, and high return, involving four aspects: technology, management, marketing, and marketing. In order to achieve innovation, emerging enterprises need to invest more funds than other companies. Once technological innovation is successful, it will improve the company's productivity and increase its profitability.

The industrialization of advanced technologies requires three stages: technology research and development, results transformation, and industrialization. Correspondingly, emerging enterprises can be divided into four stages: the establishment phase, growth period, maturity period, and recession period. As stated in the figure, each period needs different and varied inputs and determinants (Table 1).

**Table 1.** The determinants of high tech enterprises development (Ma & Chen, 2008).

The growing period	Determinants
Set up	R&D staff, huge amount of initial funds, line-functional organization structure, risk managing decision making team, product competitiveness
Growth	The enlarge of the scale of production and operation, product cost decrease, financing capability from various groups, increase the market share and innovation capability, change the organization function and structure, management risk and market risk, product competitiveness
Mature	Increase the strength in R&D, increase the input funds in technology innovation, stable organizational structure, big technology risk, change the market strategy.
Decline	Innovation in the operating, huge demand for funds, organization structure changes, the enlarge of the marketing distribution.

As a new type of financing, venture capital investment is the intermediary between ordinary investors and new emerging enterprises. It can provide the necessary support for emerging entrepreneurs in different developing stages, and it is vital to the technological innovation of emerging entrepreneurs. The functional mechanism of venture capital to the innovation promotion can be divided into three effects-capital adding effect, service value adding effect, and innovativeness improving effects—as shown in **Figure 1**.

The capital-adding effect works in this way—when the capital goes into venture capital firms, it will be made full use of, such as flowing into the emerging enterprises, buying the equipment, and paying for the employees in the emerging enterprises. So, capital flows very quickly in the market. However, if the capital goes into banks, then a part of the capital cannot be used as reinvestment—they need deposit reserves. Moreover, some financial institutions, such as speculating, only use capital in the financial market. The capital is not used in an active and value-creating way. Similarly, the capital supply increase represents investment increase. As a result, the output of the country increases, and the equipment supply increases.

### 3.2. The Effect of Venture Capital

### 3.2.1. The Value-Added Effect of Venture Capital on Emerging Enterprises

The support of venture capital to emerging enterprises includes the funds required for development and the value-added help that traditional financial institutions can provide. Risk investment institutions and venture capitalists make full use of their advantages of human resources and management experience to provide management consultants, marketing consultants, and capital operation management consultants for emerging institutions. This value-added service can be divided into three parts: management value-added, reputation value-added, and spread value-added (Wang, Wang, & Lu, 2003).

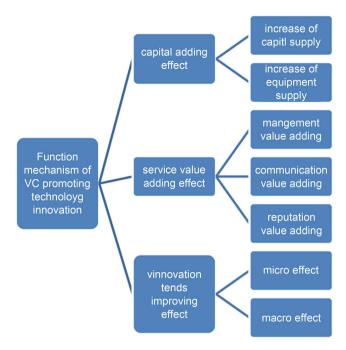


Figure 1. Functions of venture capital.

The first part is management value-added. After investing in capital and equipment investment in emerging enterprises, venture investors supervise and motivate the invested enterprises and provide professional management services for emerging enterprises. Specifically, these services include the following content.

- 1) Fund support-find cooperative investors, assist enterprises in applying for loans, improve accounting accounting, review management systems, assist IPOs, and make financial diagnoses.
- Production and technical support-Assist in establishing new factories, assist in production plans, assist in research and development, and assist in improved services.
- 3) Marketing support-planning and evaluating marketing strategies, analyzing market trends, and expanding distribution channels.
- 4) Human resources support-recruitment, recommendation management, technical talents, and establishing training institutions.
- 5) Management management support-planning business strategy, consulting internal management system, and participating in board committees.
- 6) Other support-help protect the patent, provide legal aid, and crisis management.

The second part is reputation value-added. In venture capital operations, investors conduct strict and professional evaluations and choices from many emerging enterprises. Only the brightest and most potential emerging enterprises can obtain venture capital. In this way, in addition to getting the necessary funding support for risk investors, emerging enterprises investing can also increase the reputation of the enterprise. This means that emerging enterprises that receive venture capital funds are often easier to obtain other sources of funds. In addi-

tion, they are more attractive, have better talents, and have more potential consumers. These technological developments and market acceptance of emerging enterprises are positive.

The third part is spreading value-added. As a professional capital management team, entrepreneurial investment institutions have rich resources, including human resources network resources, professionals and management talents, business network resources between entrepreneurial investment institutions and emerging enterprises, as well as professional service institutions and intermediaries and intermediaries Service network resources. The resources of venture capital institutions can provide a lot of market information for emerging enterprises to help them recruit and develop more effectively. At the same time, due to the specific situation in China, many entrepreneurial investment institutions have government backgrounds, so emerging enterprises investing often get more preferential policies.

### 3.2.2. Risk Investment to Increase the Innovative Increase in Emerging Enterprises

Innovation and additional effects of venture capital can be divided into two aspects: micro effect and macro effect. From the micro effects perspective, after investing in venture capital institutions, it has conducted more profound supervision and material incentives for emerging enterprises, promoting entrepreneurs to develop and develop with more passion and then promote the innovation of emerging enterprises. Emerging enterprises often have conservative R&D and marketing strategies before gaining investment, but they can be more aggressive and innovative after gaining funds and management support from venture capital institutions (DamanPour, 1991).

From the perspective of macro effects, the total amount of market funds can be invested in traditional or emerging industries.

On one side, venture capital investment drives a part of capital to venture capital, which can crowd out capital in traditional capital. On the other side, as the investment return of venture capital is more than traditional industry investment, more and more capital would be invested in high-tech industries. Consequently, even if the total social capital amount does not increase, the innovation created by the same amount of capital would still increase. Thus, social innovation increases.

#### 3.3. Chinese Government Intervention

### 3.3.1. Government Direct Investment

Due to the positive and external nature of venture capital, in the operation of venture capital, investment targets are mainly projects and industries with low-risk, low market risk, and short-term returns. In other high-tech projects, R & D risks and market risks are high, short-term returns are low, and it is difficult to attract enough funds. Secondly, most funds are concentrated in companies with growth or expansion, and they rarely invest in enterprises at the seed or entre-

preneurial stages. Finally, the invested area is mainly an area with developed and well-equipped facilities. Nevertheless, there is little venture capital obtained in remote areas.

However, high-tech industries and projects are essential in the long run to promote technological innovation and economic growth. The underwriting area requires more risk investment in developed economies. Enterprises in the seed or entrepreneurial period play a more important role in high-tech research and development and innovation.

Direct investment in the government refers to the government's establishment of venture capital companies and provided funds. Direct investment in the government can increase the source of venture capital and the number of venture capital. Under the influence of government direct investment, these three types of emerging enterprises are more likely to obtain venture capital when they cannot obtain funds from the market.

Direct investment in the government helps to increase the supply of risk capital and, to a certain extent, to make up for the capital gap in the market. It has a positive impact on the development and technological innovation of startups. In addition, the government's direct investment is part of the government expenditure. These costs will affect the national income level, increase national income, and increase employment.

### 3.3.2. Government Venture Capital Guide Fund

Although the government's direct investment can make up for the shortage of market funds to a certain extent, the government's total risk investment is limited. There are some problems with the government's initiator of venture capital institutions. From the perspective of the contract, government entrepreneurial investment guidance funds can not only make up for the shortage of market funds but also have an advantage over direct investment in the government.

The government entrepreneurial investment guidance fund is under the guidance of government financial funds, using government financial funds as seeds, attracting other social capital, and guiding social capital to a fund for entrepreneurial investment. Government financial funds are part of the joint-stock system and are operated by professional venture capital management institutions.

### 3.4. Government Fiscal Policy Intervention

In order to cope with the market failure caused by the positive and external nature of venture capital, the government has taken measures such as fiscal policy to internalize the externality. These financial and monetary measures include government loans, subsidies, guarantees, and purchases.

Government loan refers to the government with low-interest loans to entrepreneurial investment institutions and emerging high-tech enterprises. These loans are usually low interest rates and long-term, and sometimes, they can be repaid for free when the enterprise fails. These loans can reduce the financing costs of venture capital institutions and emerging enterprises, increase their profits, and solve the problem of shortage of funds.

Government subsidies refer to the government with free or low-cost subsidies for entrepreneurial investment institutions and emerging enterprises. This is similar to government loans. In addition, there are two special subsidies: R & D to start fund subsidies and loss subsidies.

Government guarantee refers to the government to provide guarantees for emerging enterprises. Start-ups often have high technical risks and market risks, and it is difficult to financing through traditional or even risk financing channels. With government guarantees, emerging enterprises can easily obtain funds, and financing costs are lower.

Government purchase refers to the government's products and services to purchase emerging enterprises to reduce the market risks of emerging enterprises. This helps improve the expected income of the enterprise, inspiring funding supply and R & D investment.

## 4. The Historical Stage of the Chinese Government Intervention

The development history of venture capital has gone through four stages that is the occurrence stage, the initial development stage, the adjustment stage, and the in-depth development stage. This part will briefly review its development period, development characteristics, and the government's role in development (Wang, 2011).

### 4.1. Sybility Phase (1985-1996)

Since the reform and opening up, the Chinese government has realized the importance of high-tech industries to economic growth. Compared with traditional financial channels, venture capital is more conducive to the development of technological innovation and high-tech industries. Therefore, the government regarded venture capital as an essential way to expand R & D and development during this period. The government has given discounts and support for entrepreneurial investment and has played an important role in promoting the rise of entrepreneurial investment.

China's first entrepreneurial investment institution, China New Technology Entrepreneurship Investment Corporation, was established in September 1985. Since its establishment, the company has been responsible for promoting technological innovation and economic growth. The company has become part of the national scientific and technological policy and has received strong support from relevant national ministries and commissions. However, at this time, "venture capital" is just an investment in high-tech industries, not real venture capital.

In 1991, 6 years after the establishment of China's New Technology Entrepreneurship Investment Corporation, the State Council issued a document that "the

relevant departments can set up an industrial investment fund in the high-tech development zone for the research and development of high-risk industries." During this period, the goal of venture capital was to target high-tech industries with high risk, which made it different from its original goals. Although the government does not know key issues such as the specific investment targets, project selection, organizational forms, and venture capital strategies, the support and promotion of relevant policies have established a group of government-led venture capital institutions throughout the country. There are two characteristics of China's risk investment: First, the purpose of developing venture capital is to promote technological transformation and develop high-tech industries. Secondly, the government played a leading role in the development of venture capital.

At this stage, although some venture capital companies have been established with the support of government technology input and technical policies to develop high-tech industries, their role is limited. These venture capital companies cannot complete the expected goals mainly due to internal deficiencies such as property rights and owners' lack of ownership of venture capital companies' are not based on the market's best investment target or investment plan but on the government's instructions. Some institutions only obey the requirements of relevant ministries and commissions to meet the political requirements of the government. Some institutions have invested funds into traditional industries, such as real estate and securities, rather than high-tech institutions with high risk.

### 4.2. The First Development Stage (1997-2000)

In the 1990s, the US economy showed high growth, low inflation, and low unemployment. This economy is called the new US economy. The rapid development of technological progress and high-tech industries is the core motivation to promote the rapid, stable, and long-term development of the United States. In this rapid development, venture capital played an important and necessary role.

Against this background, Chinese scholars have begun to conduct more in-depth and systematic research on risk investment theory and my country's venture capital construction. At the same time, the Chinese government has increased support for venture capital. In March 1998, the China Democratic Construction Association issued a motion on "Several Opinions on Accelerating the Development of my Country's Risk Investment". This motion caused a heated discussion on the theory of venture capital and also promoted the establishment of China's venture capital institutions. Since then, the government has successively introduced a series of policies and measures to encourage and support the development of entrepreneurial investment. These policies and measures have a positive and vital impact on the development of entrepreneurial investment. Since then, China Investment has entered the first stage of development.

China's venture capital shows two characteristics in the early stages of development. First, the number of venture capital institutions and risk investments increased rapidly. As of the end of 2000, there were 249 venture capital institutions in China, with a total capital of 51.2 billion yuan. Secondly, investors and investment time have changed. In addition to the government, some large companies and some overseas venture capital funds have also participated in investment and increased their investment. In addition, venture capital not only poured into enterprises that are already mature, but also influxed into a growing period (Wang, 2011).

There are three conditions in the first development stage. The first is to improve the market mechanism and develop related intermediaries. At the end of the 1990s, the Chinese market mechanism improved, and intermediary agencies closely related to venture capital institutions developed rapidly. These two developments are the prerequisite for China's venture capital to enter the first stage of development. The second condition is the government's support policy. From 1997 to 2000, the government published a series of documents to encourage and promote the development of entrepreneurial investment. These papers are the guarantee for the development of venture capital. The third condition is the rise of the Nasdaq. The rise of Nasdaq has a good and robust demonstration role in the first development of China's venture capital. This new investment system, different from the traditional investment system, has attracted widespread attention and inspired a group of overseas Chinese to return to China to start a business.

### 4.3. Adjustment Exploration Period (2001-2004)

With the support of relevant government policies and measures, China's venture capital developed rapidly and hugely after 1997 and reached its peak in 2000. However, since 2001, due to the slow development of the world economy and the retreat of international venture capital, China Investment has entered a stage of adjustment and exploration.

Since the emergence of China's venture capital, the government has introduced a series of policies and laws that encourage and promote the development of venture capital, and the market mechanism has been continuously improved. The improvement of these external institutional environments has effectively reduced the cost of agency and promoted the rapid development of China's venture capital. However, most funds have been invested in Internet companies with high valuations and have not received satisfactory returns.

During this period, the country's legislation on venture capital could have been better and standardized. The government regards risk capital as part of the technical investment without paying attention to returns. The existing risk investment methods are insufficient. The second board of the emerging enterprise IPO is not set up. Therefore, the only way for venture capital institutions to withdraw from venture capital is to sell stocks. The lack of this existing method

has reduced the efficiency of venture capital and has a negative impact on the circulation of venture capital.

There are two characteristics of China's venture capital at this stage. First, the growth rate of the number of risk investment institutions and the total risk investment has begun to slow down significantly. Even in 2003, the number of venture capital institutions and the total risk investment volume had negative growth. Second, the accumulation of the early stage has primarily improved the institutional environment of China's venture capital, and the agency cost has decreased significantly. Although some difficulties were encountered during the adjustment and exploration stage, there were also some promising signs—the subject of venture capital began to flow to high-tech industries, and the investment scale of emerging enterprises began to increase (Wang, 2011).

### 4.4. In-Depth Development Stage (2005 to the Present)

After 2002 and 2003, China Investment slowly recovered in 2004. The number of venture capital institutions and the total venture capital volume began to restore previous high-speed growth. As of the end of 2010, the entrepreneurial investment institutions increased to 720, and the total investment in entrepreneurial investment increased to 240.66 billion yuan. In 2005, the China Securities Regulatory Commission issued the "Notice on the Reform of the Equity Reform of Listed Companies". Since then, the capital market has gradually improved. The exit channels for venture capital have continued to broaden, and China's venture capital industry has entered a stage of in-depth development (Wang, 2011).

### 4.5. Summary

This chapter analyzes the market failure caused by external nature and the reasons for government intervention. Risk investment has two functions in the development of technological innovation: value-added effect and innovation effect.

Compared with the developed venture capital industry, China's venture capital industry has its own characteristics. This chapter reviews the four stages of the development history of China's venture capital and emphasizes the government's role in each stage. Finally, this chapter summarizes the government's intervention form of venture capital and compares the form of government intervention in China and developed countries.

### 5. Summary and Outlook

### 5.1. Summarization of the Paper

This article first introduces the relevant concepts of venture capital and analyzes the reasons, limitations, historical stages, existing problems, and government intervention in the risk investment market that the Chinese government intervened in the venture capital market. The paper consists of the following arguments: introducing venture capital and government intervention, discussing the government's intervention in venture capital, discussing the limitations of gov-

ernment intervention, and the role the Chinese government needs to play.

In particular, the introduction of venture capital is theoretical and experience comments on existing literature by analyzing the latest documents, the characteristics of venture capital, the reasons for government intervention, the limitation of government intervention in the venture capital market, and the problems brought by government excessive intervention.

The theoretical basis and policy recommendations are provided through research to promote the development of China's venture capital and government intervention.

This paper has analyzed two effects of risk investment on the development of technological innovation—value-added effect and increased innovation increase. Compared with the developed venture capital industry in Western countries, China's venture capital has its own characteristics. The article also reviews the four stages of the development of China's risk investment, emphasizes the government's role in each stage, and summarizes the government's intervention form of venture capital.

### 5.2. Recommendations to the Chinese Government

This dissertation is the outcome of a year of work and studies. So the author has some views about Chinese government intervention in the venture capital market.

Firstly, the Chinese government should transfer some of the current venture capital institutions from state-owned corporations to private firms. By this measure, the firm managers and investors do not have to link their investment performance with political performance. So they will choose the most prospecting enterprises, which will increase the possibility of profit earning. In addition, the managers and investors can handle higher risks, which is very good for newly started enterprises and Chinese technological innovativeness.

Secondly, the Chinese government should improve the legislation and prevent the possible bribery of government officers. Laws are supposed to remove venture investors from current political systems, and these investors should be assessed by their investment performance, such as return rates, rather than other political performance. As a matter of fact, the Chinese Party is unique. It has advantages in many areas, so the laws should make some limitations and restraints on the Party members and then prevent possible bribery and other activities that are not commercially oriented.

Thirdly, the government should provide a suitable environment for high-technology enterprises and venture capital. For instance, there should be some tax preference for high-technology enterprises to encourage entrepreneurs to start businesses and do R&D, and there should also be tax preference for venture capital firms. Tax preference can reduce the cost burden of enterprises and venture capital firms, and the cost reduction will encourage more enterprises and more venture capital firms.

Finally, the government should improve the current venture capital investment process, from program selection to exiting channels. The government should require more and deeper information disclosure of venture capital firms and enterprises to help ordinary and venture investors make wiser selections. The Chinese government should improve the current GEM (growth enterprise market) and give more examinations and assistance for enterprises to IPO. The improvement of GEM will encourage more venture capital to invest in high-technology enterprises due to the development of exiting channels.

### **Conflicts of Interest**

The author declares no conflicts of interest regarding the publication of this paper.

### References

Bygrave, W. D. (1987). Syndicated Investments by Venture Capital Firms: A Networking Perspective. *Journal of Business Venturing*, *2*, 139-154. https://doi.org/10.1016/0883-9026(87)90004-8

Bygrave, W. D., & Timmons, J. A. (1992). *Venture Capital at the Crossroads.* Harvard Business Press.

Chan, Y. S., Siegel, D., & Thakor, A. V. (1990). Learning, Corporate Control and Performance Requirements in Venture Capital Contracts. *International Economic Review, 31*, 365-381. <a href="https://doi.org/10.2307/2526845">https://doi.org/10.2307/2526845</a>

Cumming, D., Fleming, G., & Schwienbacher, A. (2006). Legality and Venture Capital Exits. *Journal of Corporate Finance*, *12*, 214-245. https://doi.org/10.1016/j.jcorpfin.2004.12.004

Damanpour, F. (1991). Organizational Innovation: A Meta-Analysis of Effects of Determinants and Moderators. *Academy of Management Journal*, *34*, 555-590. https://doi.org/10.2307/256406

Etzkowitz, H. (2001). The Transformation of University-Industry-Government Relations. *Electronic Journal of Sociology, 5,* 1-17.

Friedman, L. C. (1989). *Methods for Determination of Inorganic Substances in Water and Fluvial Sediments: US Geological Survey Techniques of Water-Resources Investigations.* 

GAO (1992). http://www.gao.gov/

Gompers, P. (1995). Optimal Investment, Monitoring, and the Staging of Venture Capital. *The Journal of Finance, 50*, 1461-1489. https://doi.org/10.1111/j.1540-6261.1995.tb05185.x

Gompers, P., & Lerner, J. (1996). Use of Covenants: An Empirical Analysis of Venture Partnership Agreements. *The Journal of Law and Economics*, *39*, 463-498. https://doi.org/10.1086/467356

Gompers, P., & Lerner, J. (1999). An Analysis of Compensation in the US Venture Capital Partnership. *Journal of Financial Economics*, *51*, 3-44. https://doi.org/10.1016/S0304-405X(98)00042-7

Gompers, P., & Lerner, J. (2001). The Venture Capital Revolution. *The Journal of Economic Perspectives*, *15*, 145-168. <a href="https://doi.org/10.1257/jep.15.2.145">https://doi.org/10.1257/jep.15.2.145</a>

Keuschnigg, C., & Nielsen, S. B. (2003). Taxes and Venture Capital Support. *European Finance Review, 7,* 515-539. https://doi.org/10.1023/B:EUFI.0000022144.17225.35

- Leleux, B., & Surlemont, B. (2003). Public versus Private Venture Capital: Seeding or Crowding out? A Pan-European Analysis. *Journal of Business Venturing*, 18, 81-104. https://doi.org/10.1016/S0883-9026(01)00078-7
- Lerner, J. (2002). When Bureaucrats Meet Entrepreneurs: The Design of Effective Public Venture Capital' Programmes. *The Economic Journal, 112,* F73-F84. https://doi.org/10.1111/1468-0297.00684
- Ma, B., & Chen, S. M. (2008). Analyze of the Growing Factors of the High Technology Enterprises. *China Business (Jingji Lilun Yanjiu)*.
- Martin, S., & Scott, J. T. (2000). The Nature of Innovation Market Failure and the Design of Public Support for Private Innovation. *Research Policy*, *29*, 437-447. https://doi.org/10.1016/S0048-7333(99)00084-0
- Poterba, J. M. (1987). How Burdensome Are Capital Gains Taxes? Evidence from the United States. *Journal of Public Economics*, *33*, 157-172. https://doi.org/10.1016/0047-2727(87)90072-7
- Stein, J. C. (1989). Efficient Capital Markets, Inefficient Firms: A Model of Myopic Corporate Behavior. *The Quarterly Journal of Economics*, 104, 655-669. https://doi.org/10.2307/2937861
- Tirole (1993). A Theory of Incentives in Procurement and Regulation. The MIT.
- Wang, C. K., Wang, K., & Lu, Q. (2003). Effects of Venture Capitalists' Participation in Listed Companies. *Journal of Banking & Finance*, *27*, 2015-2034. https://doi.org/10.1016/S0378-4266(02)00317-5
- Wang, Y. (2011). *Report on China's Venture Capital Investment*. Economic and Management Press. <a href="https://doi.org/10.1142/7648">https://doi.org/10.1142/7648</a>