

# The Policy Development Course and Enlightenment of Venture Capital in China Under the Background of Industrial Structure Upgrading and Transformation

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## ABSTRACT

Because of the transformation and upgrading of industrial structure in China, venture capital, a form of financing for innovative enterprises, becomes important. This paper discusses the development process and status quo of venture capital in China, and analyzes the problems of venture capital development in China and gives some policy suggestions.

**Keywords:** *Venture capital, Exit mechanism, Multi-level capital market, Financing for SMEs, Industry transformation and upgrading*

## 1. INTRODUCTION

Venture capital is a form of financing that investors provides financial support in a start-up company and gain shares of it. Venture capital usually invests a large amount of capital in the form of equity in young start-up companies. The main purpose of it is to provide capital and professional knowledge and experience to assist the invested company to obtain more profits, and obtain high returns through equity appreciation when exiting.

In recent years, China's economic development has entered a new period of growth rate change and structural adjustment. In order to solve the problem of overcapacity and achieve sustainable and high-quality economic growth, it is necessary to lead the transformation and upgrading of industrial structure by developing emerging industries through scientific and technological innovation. As venture capital provides financial support and strategic suggestions for innovative enterprises, the main members of China's emerging industries, it is an indispensable and important support for the growth of emerging industries.

Li Hongchang and Zheng Yugang (2008) analyzed the current situation of venture capital development and the existing problems of venture capital mechanism under the current legal system in China, and proposed corresponding policies and mechanisms from the macro and micro levels.[1] Huang Xianke et al. (2011) proposed that both formal and informal systems of China's venture capital system should be improved from

the perspectives of nonlinear theory and new institutional economics theory.[2] Huang Dake et al. (2012) believe that the direct promotion of the government plays a significant role in the initial stage of the development of venture capital industry, and the role of institutional factors is more significant when the development is relatively mature.[3] Bao Yingshan (2017), Chen Jin (2018), Zhang Mingxi (2018) and Cheng Junjie (2019) conducted a lot of research from the perspectives of scientific and technological innovation system, and construction of innovation ecosystem, and proposed to optimize the financial ecological environment of venture capital, enhance regional innovation capacity, and implement innovation driven policy mechanisms.[4-7] The existing research focuses on the macro system policy or micro operation mechanism of venture capital development, but few studies on China's venture capital system from the perspective of long-term development.

This paper attempts to sort out the development process of venture capital industry and system in the past 40 years of China's reform and opening up, explore the current situation of China's venture capital, and put forward relevant policy recommendations for the problems of venture capital in China.

## **2. THE HISTORY OF VENTURE CAPITAL IN CHINA**

### ***2.1. Trial Stage: Government Led Promotion (1978-1990)***

In 1978 and 1985, China issued the "decision on the reform of the science and technology system", etc., proposing to set up venture capital funds to support high-tech development projects, and set up a number of venture capital institutions with government background. China New Technology Venture Capital Corporation, the first professional venture capital institution in China, was established in 1985 to invest in small and medium-sized enterprises in the fields of information, electronics, biology, new materials and new technologies. CNTVCC has developed rapidly. From the initial investment in transportation, instrumentation, computer software and other fields to securities, real estate, credit and other industries, it has held 58 companies in 1995 with an asset scale of more than 10 billion yuan. However, many of its investment projects have not been recognized by the market, and CNTVCC failed in 1998. During the same period, IDG (International Data Group) invested in Pacific bit sports equipment company in 1989, the first venture capital investment of overseas venture capital institutions in China. At this stage, many venture capital failed because the exit channel is not smooth and the law is not perfect, which makes venture capital unable to cash into a virtuous circle.

### ***2.2. Exploration and Development Stage: Twists and Turns in Practice (1991-2001)***

From 1991 to 1998, "the proposal on developing China's venture capital as soon as possible", etc., was issued, and Nanshan venture capital fund, the first venture capital fund in China, was established. In 1999, Qingke venture capital, China's first venture capital service intermediary company, was established. In this year, nearly 200 venture capital companies have been established, mainly investing in information, software, new materials and other industries. In 2000, the "Tenth Five Year Plan" took "Introducing Venture Capital Mechanism and developing capital market" as an important task, and designated the second board market as the growth enterprise market, but it had not been launched yet, and the actual utilization efficiency of venture capital is less than 20%. In the new century, China's first batch of Internet companies are growing rapidly, and a large number of overseas students engaged in high-tech industries begin to return home. International venture capital institutions, such as AIG, Fidelity Ventures and Goldman Sachs, have successively registered in China. Sohu, Netease, Sina, Alibaba, Tencent, Baidu and other companies have been born and developed. In 1993, IDG was changed into a

partnership system, which helped Tencent and Baidu in bat to become the arrangers of China's Internet 1.0 era. However, due to the objective immature environment and the lack of continuity and stability of policies, there was a unique phenomenon of both financing and exit in this period.

### ***2.3. System Building Stage: The Growth of Multi-party Construction (2002-2013)***

From 2002 to 2007, China's law on promotion of SMEs and other laws were promulgated successively, which stipulated the establishment and filing of venture capital enterprises, investment operation, risk subsidy and other aspects.[8] The second board market has been established, the main board market has been improved, and the investment and financing channels have been widened through various ways. In 2009, China growth enterprise market held the opening ceremony; in 2012, China Securities Regulatory Commission issued the supervision and management of unlisted public companies, which further improved the multi-level capital market.

In 2001, Dachen Venture Capital, Shenzhen Venture Capital, Songhe Capital and Shenzhen Hi-tech Investment respectively invested 9.6 million yuan, 7.68 million yuan, 4.8 million yuan and 1.92 million yuan in China's largest digital TV set-top box manufacturer, Tongzhou Electronics, and obtained 25% equity. After the restart of A-share IPO in 2006, Tongzhou Electronics became the first batch of entrepreneurial enterprises to be listed on the SME board. As a result, the venture capital of early morning has achieved 40 times as an initial investor, and its profit has nearly 32 times after its total withdrawal. It is the first successful case of the venture capital institution in China.

### ***2.4. Normative and Mature Stage: the Era of Rational Mass Entrepreneurship and Innovation (2014 to present)***

In 2015, the opinions on policies and measures to vigorously promote the public entrepreneurship and innovation were introduced. The emergence of "Internet plus" emerged in China's electricity business. China's venture capital has entered the era of VC 2.0. In 2016, the State Council issued "several opinions on promoting the sustainable and healthy development of venture capital" and other policies. By the end of 2016, the number of venture capital institutions in China had reached 2045, the total amount of funds managed by equity investment institutions exceeded RMB 5 trillion, the number of registered investment institutions reached 20000, and the number of active management institutions was nearly 10000. Unicorns have become the new darling of venture capital at this stage.

In 2017, the Ministry of science and technology selected 164 Unicorn enterprises in China, with a total valuation of more than \$620 billion, of which 25% are high-end manufacturing, cloud computing, artificial intelligence and biotechnology, there are innovative enterprises in the digital economy era, such as Xiaomi, Ant Financial, Alibaba Cloud, Today's Headlines and DiDi. 76.2% of Unicorn enterprises in China are sprouting and growing in high-tech zones. The administrative intervention in the capital market has been reduced, the market stability has been enhanced, and the venture capital industry has gradually become mature and standardized.

### 3. THE PRESENT SITUATION OF VENTURE CAPITAL DEVELOPMENT IN CHINA

In 2019, China's venture capital market continued to cool down in terms of fund-raising and investment, but with the help of the sci-tech innovation board, exit market has recovered.

In terms of fund-raising, market supervision becoming stricter and trade disputes between China and the United States and other factors have affected the flow of funds into the equity investment industry narrowed, and the venture capital market had a trend to decline. According to the data of the Zero2IPO Research, in 2019, China and foreign venture capital institutions raised 702 new funds that could be invested in Chinese mainland. Among them, 698 funds that disclosed the amount raised increased the amount of capital that could be invested in mainland China by 216.79 billion yuan, down 28.3% compared with the same period last year, and the average scale of raising funds was RMB 311 million yuan. From the analysis of fund capital structure, with the increasing participation of state-owned enterprises and government guidance funds, RMB funds with state-owned assets background increased significantly in 2019, and state-owned assets became an important source of funds in venture capital market. (Figure 1)

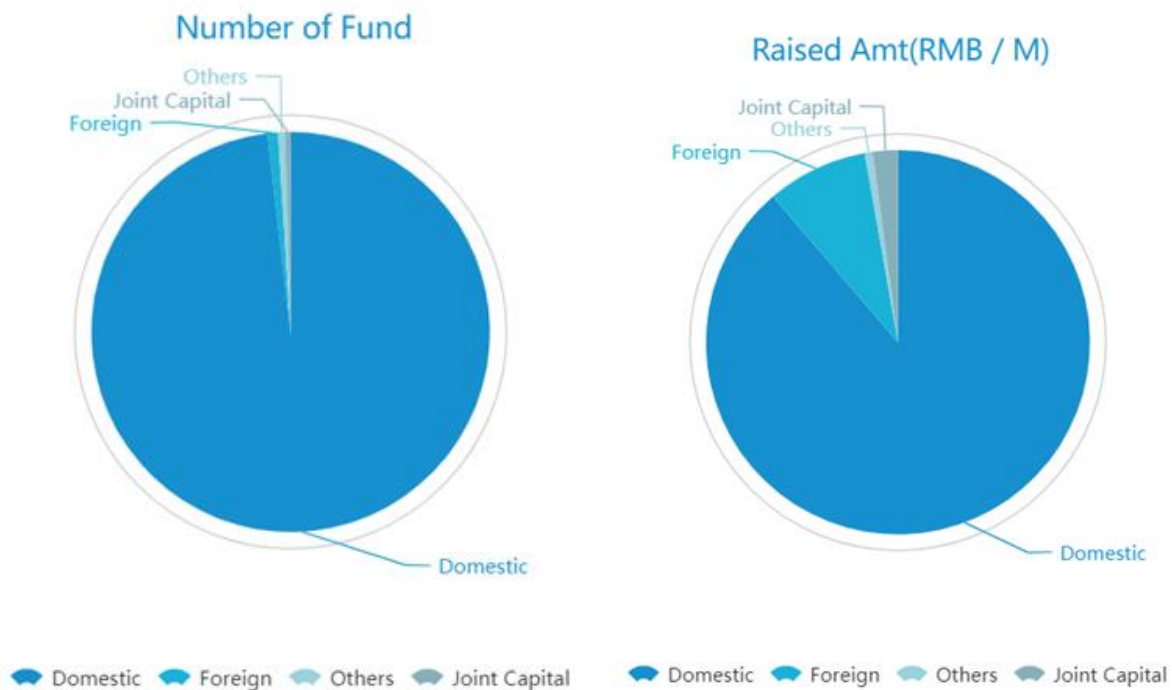


Figure 1 The number and amount of types of capital

In terms of investment, there were 3455 investment cases in China's venture capital market in 2019, a year-on-year decrease of 20.5%. 2879 investment transactions involving a total amount of 157.780 billion yuan, the investment amount decreased by 25.5% year-on-year, and the average investment scale was 54.8039 million yuan. It is worth noting that under the background of the continuous promotion of supply side reform, investment hotspots have shifted to scientific and technological projects, and the investment activity

of IT, semiconductor and electronic equipment, machinery manufacturing and other core technology industries has been relatively increased. At the same time, in a period of declining economic growth, anti-cyclical industries, such as biotechnology or healthcare, are favored by institutional investors.[9] In addition, due to the influence of national policies and business cycle, the attention of entertainment media industry and financial industry has decreased significantly. (Figure 2)

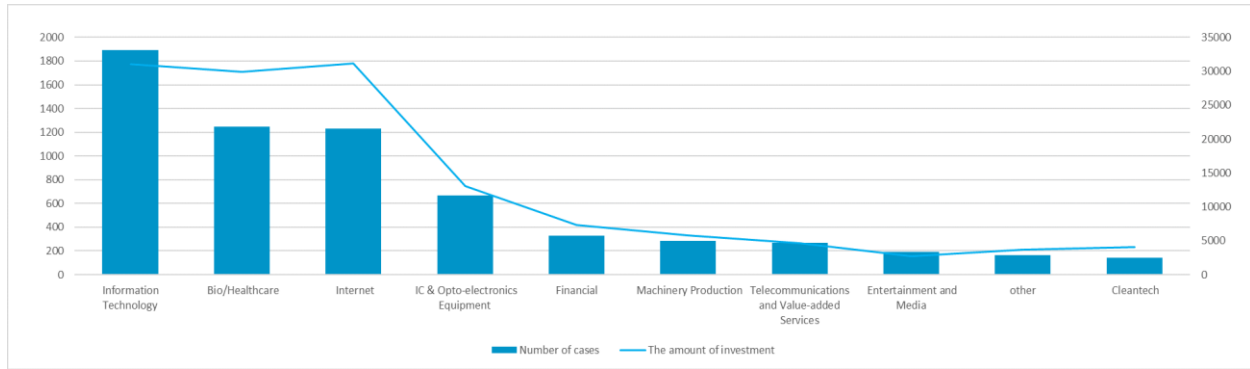


Figure 2 The number and amount of VC in different industries

In terms of exit, the sci-tech innovation board was launched, and the number of venture capital market exit cases increased year on year. A total of 1152 VC exit transactions occurred in 2019, with a year-on-year increase of 17.8%. IPO is the most important way to exit, with 581 transactions, accounting for 50.4%. Equity transfer and repurchase exit ranked second and third, with 274 and 167 respectively. There are two important changes in the exit structure of VC market in 2019: first, the stock of sci-tech innovation board is released, and the number of IPOs of invested enterprises is greatly increased. There are 248 cases of exit from the China Science and technology innovation board, with a contribution rate of 42.7%. By the end of 2019, the average stock price of 70 listed companies on the science and technology innovation board has increased by 82.4%. Secondly, the exit strategy of investment institutions has changed, and the number of buyback exits exceeds that of merger and acquisition for the first time. With the development of China's equity investment market, the exit of fund managers is more rational and pragmatic, focusing on cash return. As one of the ways to quickly recover funds, buyback exit is favored by venture capital institutions. In 2019, the number of buyback cases in VC market increased by 98.8% year-on-year.

#### 4. PROBLEMS EXISTING IN CHINESE VENTURE CAPITAL

##### 4.1. Insufficient Policy Support

According to the China venture capital development report 2017, in 2016, the Chinese government's support for venture capital institutions was mainly indirect services and tax policies.[10] Among them, 29.2% of the venture capital institutions enjoyed the information exchange policy support. 20.3% received the income tax reduction and exemption policy. 17.6% received the government's direct fund support. And 14.5% received government support in personnel training. But the policy strength is insufficient, and only 20% of the institutions enjoy the preferential treatment, and the coverage is not wide enough. There are problems such

as the policy system is not perfect, and the policies are relatively independent and lack of linkage.

##### 4.2. Slow Talent Construction

The operation of venture capital institutions can be generally divided into four stages: fund-raising, investment, management and exit. These four stages are all heavily dependent on the talent team construction of venture capital institutions and need compound talents. However, technical evaluation, capital operation, project identification, technical background, enterprise management ability and legal knowledge are the professional knowledge and abilities that Chinese venture capital professionals lack. And venture capital participating in the operation and management of enterprises is very few. In the long run, the trend of compound talents participating in enterprise operation and management will gradually rise, and the demand for compound talents will only be more and more.

##### 4.3. Not Fluent Exit Channel

At present, the main exit ways of venture capital in China are: listing, equity transfer, merger and acquisition, repurchase and liquidation. (Figure 3) IPO is the main exit channel for Chinese venture capital institutions, and the proportion of M & A and equity transfer is still relatively low. In China, the threshold of gem and SME board is high, which makes it difficult for many enterprises to be listed; the delisting and transfer system has not been implemented, which makes it difficult for unqualified listed companies to be eliminated and disrupts the capital market order; the OTC market does not keep pace with the on-the-spot market, and the property rights market is not closely linked, which makes it difficult to continue the cross regional exit; and the OTC market has not Unified and perfect property rights transaction system. "China venture capital development report 2017" shows that since 2013, more than 25% of venture capital institutions believe that the main reason for the unsatisfactory investment effect is the poor exit channel.

#### 4.4. Single Source of Funds

China's venture capital is still mainly from government funds, accounting for 36.13%, while private and mixed ownership enterprises account for 24.02%. (Figure 4) Since 2016, financial institutions have increased their investment, and social security funds have also begun to enter the market, but the proportion is still very small. And there are regional differences. The proportion of government investment in the underdeveloped areas is larger than that in the

developed areas, and the proportion of private enterprises and individual investors in the developed areas is relatively large. From the perspective of venture capital structure, unlisted companies, wholly state-owned enterprises and government financial allocation are still the most important capital suppliers. Insurance funds, pension funds and commercial bank funds are difficult to enter the venture capital market, which makes the management level of venture capital in China still far lower than that of developed countries.

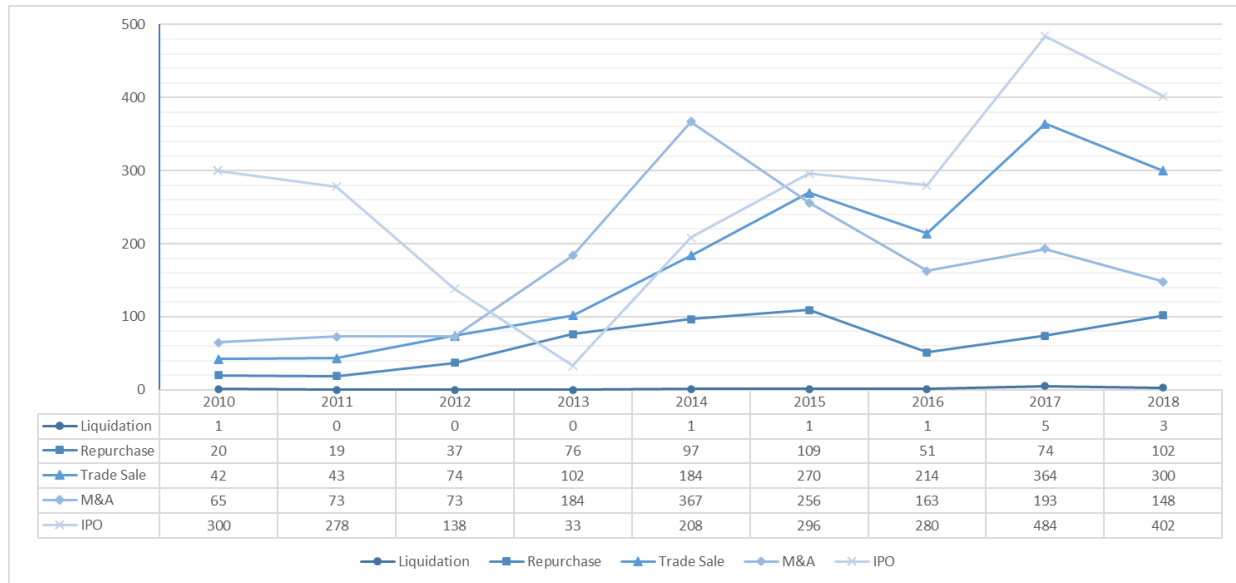


Figure 3 Exit Options of China VC (2011-2018)

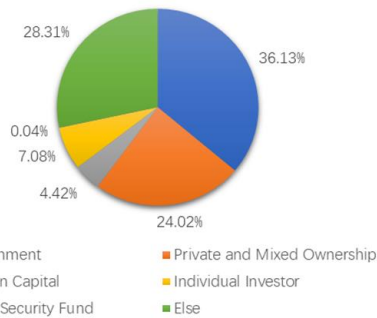


Figure 4 China venture capital sources in 2016

### 5. SUGGESTIONS ON THE DEVELOPMENT OF VENTURE CAPITAL IN CHINA

#### 5.1. Correctly Define the Role of the Government and Strengthen Policy Guidance

The role of the government is to create a good investment environment, guide the development of venture capital, properly intervene in the market, and formulate relevant incentive policies and regulations. China should set up venture capital guidance fund

according to the principle of "government guidance and market-oriented operation". It is a powerful measure for the governments of developed countries to promote the development of venture capital. It should cooperate with large venture capital institutions to guide social capital into emerging industries and regulate idle social resources. The formulation of policies should focus on long-term goals and formulate a series of interactive policy combinations. Allowing the failure of start-up enterprises, let them go through the complete development cycle, rather than simply let it difficult to maintain.

#### 5.2. Pay Attention to the Cultivation of Professional Talents

Talent construction is an important part of venture capital development, and professional compound talents are the key to the success of venture capital institutions. The management level of talents determines whether venture capital institutions have unique advantages and obtain expected returns in the fierce competition. According to the needs of different industries, training plans for talents with different backgrounds should be created, and the professionalism of investment ideas should be strengthened. For institutions, it is necessary

to strengthen the knowledge infusion of managers, keep abreast of the investment hotspots of today's society. And encourage start-up companies to formulate talent incentive strategy according to their own situation.

### **5.3. Improve the Multi-level Capital Market and the Exit Mechanism**

The capital market is the support of capital market to realize the exit of capital and finally get the return. On the one hand, the capital market eliminates unqualified enterprises through delisting mechanism, so that the enterprises with long-term poor management withdraw to the next level market; on the other hand, through the transfer mechanism, enterprises with good development and continuous economic benefits in the low-level capital market can enter the higher-level capital market. In China's multi-level capital market, the high threshold of gem makes many technology-based enterprises without income generation unable to be listed, and most unlisted enterprises are difficult to exit through merger and acquisition due to the underdeveloped OTC market. Therefore, China should not only reform the floor market, and also vigorously build the OTC market, accelerate the construction of the new OTC market, and improve the exit mechanism.

### **5.4. Broaden Sources of Funds**

Entrepreneurial enterprises come from many industries and have different risk characteristics. A single type of capital cannot meet the diversified needs of enterprises. In order to institutionalize the sources of venture capital, in addition to the government's guiding funds, it is necessary to appropriately relax the control over pension funds, introduce more institutional investors, such as commercial banks, insurance companies, trust funds, and high net worth individuals; and guide foreign capital to enter, which provides an opportunity to learn from advanced international management experience.

## **6. CONCLUSION**

At present, China's economic development needs to lead the transformation and upgrading of industrial structure through emerging industries, and venture capital provides essential and important support for these innovative enterprises. Since China's reform and opening up in 1978, the development of venture capital has gone through four stages: trial, exploration and development, gradual completion and standard improvement. Now, China's venture capital market continues to cool down in terms of fund-raising and investment. With the help of the science and technology innovation board, it has withdrawn from the market and recovered. However, there are still some problems, such as insufficient policy support, slow talent construction, poor exit channels and single source of funds. In the

face of these problems, China also needs to clarify the role of the government, strengthen policy support, train professionals, improve the multi-level capital market and improve the exit mechanism, broaden the channels of capital sources, so as to maximize the role of venture capital in promoting emerging industries.

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