

An International Comparative Study on Preference and Return Rate of Venture Capital in China and Canada

Baiqin Chen

5-1102, Lianyang Garden, 999 Dingxiang Ave Pudong, Shanghai, 200135, China

Corresponding author: Baiqing Chen

ABSTRACT: As a core capital force to promote scientific and technological innovation and industrial upgrading, venture capital has shown significant national differentiation characteristics under the background of deep adjustment of the global economic pattern. This paper selects two important global economies, China and Canada, as the research objects, and makes a systematic comparison from three dimensions of development environment, investment preference and return performance, in order to deeply analyze the structural differences and causes of venture capital market in the two countries. The study found that the venture capital in China has formed a hard technology-led investment structure driven by the policies, showing the adjustment characteristics of "volume contraction and quality increase". In recent years, the withdrawal of venture capital has gradually restored the return rate. Canada's venture capital is highly dependent on the global capital market, focusing on cutting-edge technologies such as AI, but facing limited exit channels and long-term lagging behind the global head level in return. This paper further explains the causes of the differences from the three aspects of policy environment, capital structure and industrial foundation, and puts forward some countermeasures and suggestions for the development of venture capital industry in China, such as optimizing long-term capital supply, unblocking exit channels and strengthening local ecological cultivation, so as to provide reference for promoting cooperation in venture capital field between the two countries.

KEYWORDS: *venture capital; Investment preference; Rate of return on investment; International comparisons; Hard technology*

I. INTRODUCTION

1.1 Research Background and Significance

Since the beginning of the 21st century, a new round of scientific and technological revolution and industrial transformation have evolved in depth. Strategic emerging industries such as artificial intelligence, semiconductors, life science and new energy have become the core drivers of global economic growth. As a core intermediary matching innovative projects with capital, venture capital plays an irreplaceable role in fostering innovative enterprises, promoting technological transformation and creating emerging industries. According to the Global Entrepreneurship Monitor (GEM) data, global venture capital-backed innovative enterprises contribute more than 10% of global GDP and create more than 15% of jobs. The development quality of venture capital market directly affects a country's innovation competitiveness.

As two economies occupying different positions in the global industrial chain, China and Canada have significant differences in the development path and market structure of the venture capital industry. The venture capital industry in China started in the late 1990s. In less than 30 years, it has developed from scratch into the world's second largest venture capital market, with a management scale exceeding RMB14 trillion. Under the guidance of policies, it has formed an investment structure serving the national strategy and become the core financial engine for cultivating new quality productive forces. As a country with strong innovation vitality in developed economies, Canada has formed a focus on frontier technology investment relying on the advantages of high-quality universities and natural resources. However, Canada has long faced the problems of insufficient expansion of local scale and dependence of exit channels on foreign capital markets. At present, the global geopolitical structure is reconstructed, and the characteristics of capital flow regionalization are prominent. Comparing the differences in investment preference and return rate of venture capital industry between the two countries is not only helpful to clarify the development laws of venture capital industry under different institutional environments, but also has important theoretical and practical significance in promoting the high-quality development of venture capital industry in China and deepening investment cooperation in innovation field between China and Canada.

1.2 Literature Review

The domestic and foreign academic circles have accumulated a certain amount of research on the comparison of venture capital between different countries. The early research mainly focuses on the comparison between developed countries, such as the difference between the venture capital market in the United States and Europe. The research points out that the United States relies on the NASDAQ market to form a perfect exit channel, so the return rate is significantly higher than that in the European market, forming a more radical early investment preference. Some scholars' comparative research on emerging markets and developed markets points out that the venture capital industry in emerging markets is often driven by policies, with a high proportion of policy-guided funds. The investment stage is more towards the later stage and the return rate fluctuates more. In view of the comparative study of venture capital between China and Canada, the existing literature mostly focuses on the single dimension research of Canadian venture capital on innovation ecology, while the systematic comparative study on investment preference and return rate is relatively scarce. The existing research on venture capital in Canada points out that there is a "scale expansion gap" in the venture capital industry in Canada for a long time. Local innovation projects are often acquired by American capital after they grow up, and intellectual property rights and control rights are outflow, resulting in the return rate of local venture capital lagging behind that of the United States for a long time. The research on venture capital in China pointed out that the venture capital industry in China is currently in a period of deep adjustment. It has changed from the past scale expansion to quality improvement. Hard technology has become the mainstream of investment and the rate of return has gradually stepped out from the downward cycle of 2023-2024. However, the existing research has not compared the systematic comparison of investment preference and return rate between the two countries in combination with the latest market changes, so this paper makes supplementary research in this field.

1.3 Research methodology and framework

This paper uses the methods of comparative study, statistical analysis and case study to sort out the development environment of venture capital industry in the two countries, and then compares the differences of investment preference from three dimensions of investment field, investment stage and capital source, further compares the overall performance of venture capital return rate in the two countries and the difference of return rate in different fields at different stages, and finally analyzes the causes of the differences and puts forward countermeasures and suggestions. The framework of this paper is as follows: the second part combs the development status and development environment of venture capital industry in the two countries, the third part compares the differences in investment preference from multiple dimensions, the fourth part compares the performance differences in return rates, the fifth part analyzes the core factors of the differences, and the sixth part puts forward conclusions and suggestions.

II. COMPARISON OF THE DEVELOPMENT ENVIRONMENT OF VENTURE CAPITAL INDUSTRY BETWEEN CHINA AND CANADA

2.1 Development Environment of Venture Capital Industry in China

2.1.1 Policy Environment: Institutional Support Driven by National Strategies

The development of venture capital industry in China has always been closely bound up with the national innovation-driven strategy, and policy support has been continuously strengthened. From the "No.1 Proposal" put forward by the CPC Central Committee in 1998, which started the development of venture capital in China, to the "14th Five-Year Plan" which clearly proposed to strengthen the national strategic scientific and technological strength, the establishment of a trillion-level national venture capital guiding fund, and the continuous improvement of policy support, by 2025, the total size of the national government guiding fund exceeded 6 trillion yuan, focusing on hard science and technology, green energy, bio-medicine and other areas in line with the national strategic direction.

The capital market reform has provided the institutional basis for the withdrawal of venture capital. The establishment of the North Stock Exchange, the expansion of science and technology innovation board and the full implementation of the registration system have provided diversified withdrawal channels for scientific and technological enterprises at different growth stages. As of 2025, the IPO volume in science and technology innovation board accounted for about 40% of the total market, creating convenience for the withdrawal of venture capital. In view of the long-standing problem of "withdrawal of funds from investment management" in the venture capital industry, the regulatory authorities continued to push forward the reform, broaden the sources of long-term funds, promote social security and insurance funds to increase the proportion of equity investment, implement differentiated supervision and tax incentives for venture capital funds, promote the S-fund trading and share transfer pilot, and continuously improve the institutional environment for the development of the

industry. The 2025 government work report once again emphasizes the role of venture capital in fostering new momentum and leading the new track, and the confidence of the industry in development continues to increase.

2.1.2 Economic environment: New And Old Kinetic Energy Conversion Creates Investment Demand

China's economy has entered a stage of high-quality development. The conversion of new and old kinetic energy has accelerated. The added value of strategic emerging industries accounts for more than 17% of GDP, and the average annual growth rate in areas such as artificial intelligence, semiconductors and new energy is more than 20%. This has created a large number of high-quality investment targets for venture capital and attracted more venture capital. The upgrading of consumption and digital transformation have spawned a large number of new business formats. In 2023, corporate services, medical and health care and financing for new consumption tracks increased by 35%, 28% and 22% respectively, which has become an important direction for the layout of venture capital.

At present, the venture capital industry in China has experienced a profound adjustment. Since 2021, the amount of capital raised has continued to decline. By 2024, the amount of capital raised has dropped to about 400 billion yuan, a significant decrease from 2021. However, from the investment side, about 15,300 transactions still took place in the national venture capital market in 2024, with a total investment of about 1.67 trillion yuan. The industry has changed from the previous scale expansion to the quality improvement, with more than 50% of the capital invested in new economic fields such as semiconductors. Boosting the real economy and scientific and technological innovation. As of the end of June 2025, the management scale of the national equity venture capital fund industry exceeded RMB14 trillion, and the "withdrawal from offering" has picked up. New investment projects increased by 13% year-on-year, and the withdrawal from projects increased by 21% year-on-year. The industry has stabilized and is resilient.

2.1.3 Technology Environment: Rich Application Scenarios Drive Innovation Transformation

China has the world's largest consumer market and a complete industrial chain system, providing rich application scenarios for the landing of innovative technologies. The AI, block chain and other technologies reshape the investment decision-making process. The head office uses big data to mine potential unicorns, raising the investment hit rate to 30%. The industrial Internet penetration rate exceeded 50%, and the valuation premium of projects in the fields of intelligent manufacturing and intelligent medical treatment was significant. The average valuation of early projects exceeded RMB500 million. In recent years, the frontier fields of quantum computing, gene editing, commercial spaceflight and so on have entered the critical point of industrialization, with cases of single financing exceeding RMB1 billion occurring frequently, creating rich investment opportunities for venture capital. At the same time, under the background of restructuring the global industrial chain, there is a strong demand for domestic substitutes, and there is a huge investment space in "stuck" links such as semiconductor equipment, EDA tools and high-end materials, which attract a large number of venture capital layouts.

2.2 Canadian Venture Capital Industry Development Environment

2.2.1 Policy Environment: Free Market-led With Prominent Local Expansion gap

The development of Canada's venture capital industry is dominated by the free market. The government's guidance to the venture capital industry is far less than that of China. The core problem facing the local venture capital industry for a long time is the scale expansion gap. After a large number of local innovative enterprises grow to a certain stage, they are acquired by American capital and their ownership, intellectual property rights and decision-making power are transferred overseas. As a result, Canada not only loses its economic benefits, but also loses its influence on industries and technologies that shape the future. The report of the Commercial Development Bank of Canada (BDC) pointed out that Canada's venture capital industry has been restricted in its exit channels, and its rate of return has lagged behind that of its global peers such as the United States for a long time. The amount of domestic capital raised has dropped to the lowest level in recent years, and the urgency of industry development has been increasing.

According to the 2023 National Attraction Index for Venture Capital and Private Equity published by IESE Business School, Canada ranks fourth in the world with a score of 86.6, second only to the United States, the United Kingdom and Japan. The overall investment environment is highly appraised. This is mainly due to Canada's sound investor protection system, good entrepreneurial culture and open market environment. However, the lack of local capital to support local enterprises to become bigger and stronger is a long-standing pain in the industry.

2.2.2 Economic Environment: Relying On Export of Resources, the Scale of Innovation Industry Is Small

Canada's economy is highly dependent on the export of natural resources. Traditional industries such as energy, minerals and forestry account for a relatively high proportion of the economy. The innovation industry as a whole is small in scale and has a limited carrying capacity for venture capital. A large number of local

innovation projects were eventually acquired by American enterprises, making it difficult for the local venture capital industry to form a virtuous circle of "investment-exit-reinvestment". In recent years, global geopolitical uncertainty has increased, trade pressure has increased, and global competition for strategic technologies such as artificial intelligence, life science and national defense has intensified. As an open economy, Canada has been more affected by global market fluctuations, and changes in the external environment have brought greater pressure to the local venture capital industry.

The current global AI wave has led to an increase in the popularity of Canada's venture capital industry. In 2025, AI investment accounted for nearly half of all venture capital in Canada and became an absolute investment hotspot. However, the entire industry's later growth is highly dependent on foreign capital, and the supply of local capital is insufficient to support the growth of enterprises, which is still the core bottleneck.

2.2.3 Technological environment: strong basic research and insufficient transformation

Canada has a number of top universities in the world, such as the University of Toronto and McGill University, which have strong advantages in the field of basic research of artificial intelligence. The basic research of AI field is the world's leading and produces a large number of original results. However, the local industry is insufficient in supporting and the ability to transform innovative results is weak. A large number of research results have left Canada to realize industrialization in the United States. Therefore, although the local venture capital industry can dig out high-quality projects in the early stage, the U.S. capital is often required to take over in the later stage of growth, which results in that the local investors can only obtain early returns and are difficult to share in the high returns in the later stage of the growth of businesses.

III. COMPARISON OF VENTURE CAPITAL PREFERENCE BETWEEN CHINA AND CANADA

3.1 Comparison of Investment Preference

3.1.1 China: Hard Technology Dominated, Multi-track Coordinated Development

At present, the venture capital industry in China is characterized by absolute dominance of hard science and technology and multi-track coordinated development. Over 50% of the capital is invested in new economic and hard science and technology fields such as semiconductors, artificial intelligence and new energy. This is not only the result of national strategic guidance, but also the inevitable result of the demand for industrial upgrading in China. In terms of segments, China's venture capital mainly has four core racetracks:

First, domestic alternative racetracks in the field of hard science and technology, with "stuck" links such as semiconductor equipment, EDA tools and high-end materials becoming hot spots for investment. In 2023, the financing in the semiconductor field exceeded RMB300 billion. Local investment institutions such as SMIC Juyuan invested heavily in domestic enterprises in sub-sectors such as core components in mask aligner to realize the domestic alternative layout of the industrial chain. Second, the green technology track, carbon neutralization and the energy revolution have promoted a large number of investment opportunities. Financing for new energy storage, carbon management services and other areas has grown at a high speed. Financing for energy storage exceeded RMB150 billion in 2023. Commercialization of new energy storage technologies such as sodium ion batteries and liquid flow batteries has accelerated. Carbon footprint accounting and valuation premium for carbon capture technology companies have reached 3-5 times, making them hot spots for investment. Third, the medical and health track is driven by both innovative medicine and digital medicine. The number of clinical applications for innovative medicine in China accounts for more than 20% of the world's total. The fields such as gene cell therapy and medical AI have become the focus of investment. The value of AI-assisted new drug research and development enterprises has exceeded RMB10 billion, and UIH Intelligence, Inference Medical and other enterprises have relied on AI imaging diagnosis to enter the 100 billion-level medical insurance market, attracting a large amount of risk capital layout. Fourthly, the enterprise service track, the digital transformation to promote the rapid growth of enterprise service investment, China enterprise cloud rate of less than 30%, SaaS, low code platform penetration rate increased by 5 percentage points per year, the root of the Internet, Xu Gonghan cloud and other industrial Internet platform valuation growth rate of more than 40%, become an important direction of venture capital layout.

Apart from hard science and technology, the new consumption track still maintains a stable investment scale with the consumption upgrade to meet different risk capital layouts. The consumption upgrade involves many fields such as agriculture, industry, education and medical treatment, and there are still a large number of investment opportunities.

3.1.2 Canada: AI is Absolutely Focused, Supplemented by Resources-related Rreas

Canada's venture capital industry is highly focused on the field of artificial intelligence. In 2025, AI Alone Accounted for Near Half of All Venture Capital Invested in Canada, AI accounted for nearly half of Canada's total venture capital investment and became the absolute core track. This relies on Canada's advantages in the field of basic research of artificial intelligence. Toronto's artificial intelligence ecosystem has gathered a

large number of start-ups to attract venture capital to lay out one after another. In addition to AI, the fields of life science, national defense and dual-use innovation have also received more investment attention as the global strategic technology competition intensifies.

In the traditional field, relying on Canada's natural resources advantages, energy-related green technology innovation, such as clean energy technology, also has a certain scale of investment, but the overall investment scale is much smaller than that in AI field. Structurally, Canada's venture capital is highly focused on frontier basic research transformation projects. Investment in local traditional industries is relatively low. Investment in the manufacturing sector in the middle and lower reaches of the hard science and technology industry chain is insufficient. A large number of projects are often acquired by US capital after growth. Therefore, local venture capital is rarely held until later withdrawal.

Ontario Investment Management Company (IMCO), as an important institutional investor in Canada, received a high return on its investment in CoreWeave, an AI cloud service provider, in the investment case of 2025, which also reflects the preference of Canadian institutional investors for the AI sector. The investment income of this institution in the AI sector contributed a majority of the private equity investment income in 2025.

3.2 Comparison of Investment Stage Preference

3.2.1 China: the Proportion of Early Investment Increased, Covering the Whole Stage.

The investment stage of the venture capital industry in China presents the characteristics of gradual increase in the proportion of early investment and full-stage coverage. With the transformation of the industry from scale expansion to quality improvement, more and more institutions begin to extend forward, and the proportion of early investment gradually increases. According to the development trend of the industry, the investment stage is more diversified. Head institutions such as Sequoia China and Hillhouse Capital have realized the full-cycle layout from angel to Pre-IPO, while small funds rely on the advantages of professional teams to be more flexible in the early investment field, and the advantages gradually emerge. Therefore, the proportion of early investment has continued to increase in recent years.

From the overall data, in 2024, seed round, angel round, Pre-A round and other early-stage investments accounted for 42% of the venture capital investment in China, up 8 percentage points from 2020, reflecting that the investment stage moved forward and early-stage investments received more and more attention. On the one hand, the policy guidance fund increased its support for early-stage hard science and technology projects, and on the other hand, institutional investors increased their support for early-stage innovation projects. Of course, the Pre-IPO round investment still accounts for a certain proportion. Some institutions still prefer low-risk projects in the later stage. The investment stage is characterized by differentiation. The head institution covers the whole stage. Small and medium-sized institutions focus on the early segmentation of the track. Regional institutions such as CICC Capital account for more than 50% of the Pre-IPO round investment.

Current stage distribution of venture capital industry in China: it is difficult to finance early projects, and the valuation of later projects is gradually rationalized. In the past, the upside-down phenomenon of valuation between primary market and secondary market is gradually relieved, the investment stage is gradually moved forward, and the space for early return on investment is gradually opened.

3.2.2 Canada: the Early Stage Investment is the Main Part and the Late Stage Local Capital Is Insufficient

The investment stage of Canada's venture capital industry is characterized by early investment and severe shortage of local capital in the later stage. Local venture capital institutions pay more attention to early projects. When the projects grow to the later expansion stage, the local capital is difficult to meet the demand for large-scale financing. As a result, the local venture capital is often taken over by the US capital, resulting in the withdrawal of the local venture capital and the inability to share the benefits of the later growth of the enterprise. The BDC report points out that the core problem of Canada's venture capital industry is the scale gap. Local capital cannot support local innovative enterprises to complete the scale expansion in the later stage. As a result, a large number of enterprises have lost control. Local investors can only obtain low returns from early exit and cannot obtain long-term growth gains.

From the data, the investment proportion in early stage in Canada exceeded 55%, higher than that in China, but the investment proportion in late stage was less than 20%, far lower than the level of about 38% in China. The core reason was the insufficient scale of local capital. The amount of local capital raised in recent years dropped to the lowest level in recent years, so the investment capacity in late stage was insufficient. A large number of local innovative enterprises rely mainly on overseas capital such as the United States for financing after the development of round B. Therefore, local venture capital institutions often withdraw before round B and cannot retain their equity interests for listing, thus lowering the overall return rate.

3.3 Comparison of Capital Source Structure Preference

3.3.1 China: the Government Guides the Gradual Entry of Market-oriented Long-term Capital with a High Proportion of State-owned Assets.

In the capital source structure of venture capital in China, the current state-owned assets background LP contribution accounts for more than 70%, and the government-led fund is an important source of capital. This structure is the core feature of the policy-driven venture capital market in China. The policy-led fund is directed to the hard science and technology field that meets the national strategy, and promotes the industry to develop in a direction that meets the national development needs. However, there are also certain problems. The lack of participation in market-oriented long-term capital, such as insurance and pension, has led to the short-term investment strategy. In recent years, the regulatory authorities have promoted social security and insurance funds to increase the equity investment ratio, and the practice of insurance funds entering the market has accumulated experience. The market-oriented long-term capital ratio has gradually increased.

From the perspective of investors, China's venture capital market has diversified types of investors. The market-oriented institutions, industrial capital CVC, regional state-owned institutions and foreign-funded institutions have developed together. Industrial capital CVC has risen in recent years. Huawei Hubble, Tencent Investment, Xiaomi Investment and other industrial capital rely on the industrial ecology to invest in the industrial chain with obvious advantages. Huawei Hubble focuses on the semiconductor industrial chain and has invested more than 100 enterprises in total, 90% of which are upstream enterprises such as materials and equipment, forming an investment pattern of industry and capital cooperation and becoming an important participant in the venture capital market in China.

3.3.2 Canada: Mainly Institutional Investors, Relying on Foreign Capital

The sources of venture capital capital in Canada are mainly institutional investors such as local pension funds. Ontario Investment Management Company and Canada Pension Scheme Investment Committee are the largest institutional investors in Canada and the major suppliers of venture capital capital. The overall private equity investment return rate of local institutional investors in 2025 was 6.5%, with a steady overall performance. However, the scale of local capital is insufficient, so it is highly dependent on foreign capital such as the United States. American venture capital institutions accounted for more than 60% of the investment in Canada in the later stage. Local enterprises mainly rely on foreign capital for financing in the later stage. The problem of difficulty in raising funds for a large number of local venture capital institutions is outstanding, and the amount of domestic capital raised has dropped to the lowest level in recent years.

IV. COMPARISON OF RETURN ON VENTURE CAPITAL BETWEEN CHINA AND CANADA

4.1 Comparison of Overall Rate of Return Levels

4.1.1 Rate of return on venture capital in China: after the cycle adjustment, it will gradually recover and the space for long-term return will be opened.

The venture capital industry in China experienced a profound adjustment from 2021 to 2024. Affected by the economic downturn, the exit was more difficult and the valuation upside down was obvious. In 2024, the market-wide exit events decreased by 11.6% year-on-year, and the exit amount decreased by 46.9% year-on-year, which led to a gradual decline in the overall industry return rate and a gradual drop in DPI (paid-in capital dividend rate) to about 0.8 times. However, since 2025, with the gradual recovery of "offering and withdrawal", new investment projects have increased by 13% year-on-year, while withdrawal projects have increased by 21% year-on-year. Withdrawal from the recovery has led to the gradual restoration of the rate of return. Head-end regional institutions such as Shenzhen Venture Capital achieved 1.5 times the DPI in 2023, and the overall performance was better. The industry-wide average DPI has gradually recovered to about 1 time.

From the perspective of different institutional types, industrial capital CVC relies on industrial empowerment with a higher than average rate of return. In Huawei's Hubble Investment Project, more than 20% of the projects have been IPO-withdrawn, with an average internal rate of return (IRR) of more than 20%. Head-market institutions such as Sequoia China reached 25 IPO-withdrawal projects in 2023, with an average IRR of more than 18%. The overall rate of return is better. Small and medium-sized early-stage funds rely on professional competence and the rate of return is also higher than the industry average. Small-sized funds have obvious advantages over large-sized funds in a long time dimension.

In the long run, with the smooth exit channel, the continuous improvement of the S fund market and the gradual return of the valuation to rationality, the long-term return space of the venture capital industry in China is gradually opening up. Although the period of hard science and technology projects is long, the level of return is gradually improving. It is expected that the industry-wide average IRR will be maintained in the range of 12%-15% in the next 10 years, which is higher than the level of mature developed markets.

4.1.2 Return on Venture Capital in Canada: Lagging Behind the World's Top Level For a Long Time, with Low Overall Return.

The return rate of Canada's venture capital has lagged behind that of its global counterparts such as the United States for a long time, the exit channel is limited, and the local investment is insufficient in the later period, resulting in the overall low return rate. The BDC report clearly points out that the exit of Canadian venture capital is still restricted, and the return rate lags behind that of global peers such as the United States. The domestic fundraising has dropped to the lowest level in recent years. The DPI of the industry as a whole has been maintained at about 0.9 times for a long time. The average IRR is about 8%-10%, which is lower than the current average in China and also lower than the average of more than 15% in the United States.

From an institutional point of view, Canada's head institutional investors performed better. Ontario Investment Management Company's overall return on investment in 2025 was 7.4%, among which the return on private equity investment was 6.5% and the return on equity investment was 19.1%. The overall performance was better, which benefited from the revenue of 1 billion Canadian dollars from the investment in CoreWeave in the AI field. This single project contributed most of the private equity revenue, reflecting that Canada's venture capital revenue was highly concentrated in a few AI projects, the overall return was unevenly distributed, and the return on most projects was low.

On the whole, the Canadian venture capital industry has experienced large-scale expansion gaps at home, resulting in a large number of projects exiting early and unable to share the growth gains at the later stage. As a result, the overall return rate is lower than that of mature markets such as the United States and the current adjusted China market.

4.2 Comparison of Returns in Different Fields

4.2.1 Comparison of Returns in Different Fields in China

The return rate of venture capital in China varies significantly among different areas. Although the investment cycle is long in hard science and technology, the return rate is relatively high. In the field of domestic semiconductor substitution, the average IRR of investment projects in the past five years has exceeded 18%, especially in domestic substitution links such as equipment and materials. As demand is strong and the return rate is higher, some head agencies have invested in domestic semiconductor equipment companies with an IRR of over 30%. In the field of green science and technology, the return on investment in new energy, energy storage and other fields is also relatively high, with an average IRR of more than 16% in the past five years. Star projects such as Contemporary Amperex Technology Co., Limited and Longji Green Energy have brought hundreds of times of returns to investors, making the return rate in the field of green science and technology higher. In the field of medical and health care, the return rates in the fields of innovative drugs and gene cell therapy are differentiated, but the average IRR is in the range of about 12%-15%, the return rate of successful projects exceeds 40%, and all the failed projects also suffer from losses, with the overall return rate on the medium side. In the new consumption area, the return rate has decreased in recent years, because the market is highly competitive, with an average IRR in the range of 8%-10%, and the return rate of head items is still relatively high. In the field of enterprise services, SaaS and industrial Internet, the average IRR for the past five years is about 14%. With the acceleration of the digital transformation of enterprises, the rate of return has gradually increased.

4.2.2 Comparison of Returns in Different Fields in Canada

The return rate of Canada's venture capital AI field is significantly higher than that of other fields. The investment of Ontario Investment Management Company in CoreWeave, with an investment of US\$ 150 million in 2023, received a return of approximately US\$ 723 million of 1 billion Canadian dollars after the reduction in 2025. The return is nearly four times in less than two years, and the IRR exceeds 100%, which reflects the high return characteristic of AI field. However, except for the Head AI Project, the return rate in other fields is generally low. The return rate in the life science field is approximately in the range of 10%-12%, the return rate in the traditional energy-related field is approximately in the range of 6%-8%, and the real estate-related field suffered a small loss in 2025. On the whole, the return rate is highly dependent on a few head AI projects, and the return rate in most fields is lower than that in the same field in China.

4.3 Comparison of Return Rate at Different Investment Stages

4.3.1 Comparison of the Returns at Different Stages in China

The return rate of early venture capital projects in China has gradually increased in recent years, because the valuation has been gradually rationalized and the exit channel has been unblocked. The average IRR of early venture capital projects is in the range of 18%-20%, which is higher than the average level of 10%-12% of later venture capital projects. Small professional funds focus on early segmentation of the track, and the average return rate exceeds the industry average. The advantages are prominent, which conforms to the rule of high return rate of early venture capital investment in the world. For the Pre-IPO project in the later stage, the return rate has been gradually reduced in recent years due to the problem of upside-down valuation, with the average IRR ranging from 8% to 10%. With the gradual rationalization of valuation, the price difference in the primary and secondary markets has been gradually restored, and the return rate of the project in the later stage has also gradually recovered.

4.3.2 Comparison of Canada's Returns at Different Stages

The return rate of early Canadian projects is about 12%-15%, which is higher than that of late China projects, but lower than that of early China projects, because early projects are often acquired by foreign capital at a later stage of growth, and local investors withdraw early, so they can only obtain part of the early gains and cannot share the high return of late growth, so the overall IRR is lower than that of early China projects. The overall return rate of the later stage projects is about 8%-10% due to the small participation of local capital and the small participation of local investors, thus lowering the overall return rate.

V. ANALYSIS ON THE CAUSES OF DIFFERENCES IN VENTURE CAPITAL PREFERENCE AND RETURN RATE BETWEEN CHINA and CANADA

5.1 Policy Environment Differences: Policy Guidance vs Free Markets

The difference in venture capital preference and return rate between the two countries firstly stems from the difference in policy environment. The development of venture capital industry in China is guided by the national innovation-driven strategy. The policy-oriented fund invests heavily in hard science and technology, which promotes the adjustment of investment structure to conform to the national strategic direction. At the same time, the capital market reform keeps unblocking the exit channel, which provides the basis for the return rate restoration. However, Canada pursues a free market policy, the government does not give sufficient guidance to the venture capital industry, and local capital is difficult to fill the gap of large-scale expansion, which results in a large number of outflow of corporate control rights and lowers the local rate of return. The difference in policy environment is one of the core reasons for the difference.

China's policy environment has also brought about differences in investment preferences. The policy has led long-term capital to invest in hard science and technology, forming an investment structure dominated by hard science and technology. In the Canadian free market environment, capital naturally flows to the AI field with outstanding advantages in basic research, forming an investment structure with high concentration of AI.

5.2 Differences in Industrial Bases: Whole Industrial Chain vs Advantages In Basic Research

Differences in industrial bases between the two countries have also led to differences in investment preferences and return rates. China has the most complete industrial chain system in the world, covering the entire industrial chain from basic research, pilot testing to large-scale manufacturing. Therefore, innovation projects can complete the whole life cycle growth at home, and do not need to rely on foreign capital. Therefore, venture capital can exit from early holding to listing, sharing the benefits of growth at all stages. Therefore, the return rate is higher. However, Canada has a strong advantage in basic research, but the local industries are not well matched and lack large-scale manufacturing capacity and local market. Therefore, the innovation projects will inevitably be acquired by American capital after they grow up. Local investors can only withdraw in advance and obtain lower returns, so the return rate is lower.

Differences in industrial bases also lead to differences in investment fields. China has huge domestic substitution demand, so there is a strong demand for investment in hard science and technology fields such as semiconductors and high-end manufacturing. Canada has advantages in basic AI research, so investment in AI field is highly concentrated.

5.3 Capital Structure Differences: Policy Capital Driven vs Depends on Foreign Capital

Differences in capital structure between the two countries also lead to differences in preference and rate of return. In China, state-owned capital accounts for a high proportion of capital sources, and policies guide investment in long-term hard science and technology projects to support enterprises' all-stage growth. Therefore, a complete exit can be formed. In Canada, local capital is insufficient in scale and highly dependent on foreign capital, and the latter stage investment is mainly completed by foreign capital. Therefore, local capital can only exit and cannot obtain late-stage income, thus lowering the overall rate of return.

In recent years, China has continuously promoted the entry of market-oriented long-term capital, continuously optimized the capital structure, increased the long-term capital supply, pushed forward the investment stage, and gradually improved the long-term return rate. However, the difficulty of raising capital in Canada has been increasing, and the shortage of capital supply has become increasingly prominent, further widening the return rate gap with China.

VI. CONCLUSIONS AND RECOMMENDATIONS

6.1 Research Conclusions

This paper draws the following conclusions through the international comparison of venture capital preferences and returns between China and Canada:

First, there is a significant difference in the development environment of venture capital industry between the two countries. China has formed a development model of policy-driven service to the national strategy. Canada is a development model dominated by the free market and relying on the advantages of basic research. China is currently in a period of deep adjustment of "quantity shrinking and quality improving". The characteristics of stabilization and improvement are prominent. Canada has long been facing a shortage of local large-scale expansion and insufficient capital supply.

Second, there are obvious differences in investment preferences. China has formed an investment structure of coordinated development of hard science and technology industry chains and diversified racetracks. The proportion of early investment has gradually increased, and the proportion of capital from China is relatively high. Canada is highly focused on the AI field, focusing on early investment and insufficient capital at the later stage, and is highly dependent on foreign capital.

Third, the rate of return level in China is higher than that in Canada. The rate of return in China gradually recovers after the cyclical adjustment. The industry-wide average long-term return is expected to remain in the range of 12%-15%. The rate of return in Canada lags behind the global head level for a long time, with an average rate of return of approximately 8%-10%. The rate of return is highly dependent on a small number of AI head items and is unevenly distributed.

Fourthly, the causes of the differences are mainly from three aspects. In terms of policy environment, China's policy guides and supports the industry development, and there is a large-scale gap in the laissez-faire development of the Canadian free market; In terms of industrial foundation, China has a complete industrial chain to support the development of the whole life cycle, while Canada has the advantage of basic research and insufficient local transformation; In terms of capital structure, China's policy capital supports all-stage investment, and Canada's domestic capital is insufficient to rely on foreign capital.

6.2 Suggestions on the Development of Venture Capital Industry in China

First, we will further broaden the sources of long-term capital, promote market-oriented long-term capital such as social security and insurance to increase the proportion of equity investment, optimize the capital structure, reduce the problem of short-term investment caused by excessively high proportion of policy capital, enhance the industry's long-term investment capacity, and support the development of early hard science and technology projects.

Second, we will further unblock the exit channel, continue to promote the development of the S fund market, improve the share transfer pilot, optimize the IPO policy, further ease the problem of upside-down valuation in the primary and secondary markets, enhance the exit efficiency of the industry and improve the performance of the return rate.

Third, strengthen the cultivation of local innovation ecology, promote the local transformation of basic research results, improve the supporting industrial chain, support local innovation enterprises to grow from small to large, and form a virtuous circle of "investment-exit-reinvestment" at home, so as to avoid repeating the same mistake as the scale gap in Canada.

Fourthly, to deepen the cooperation between China and Canada in the field of venture capital, China capital can rely on the advantages of Canadian basic research to lay out early AI projects, and at the same time, promote the industrialization of achievements in China, realize mutual complementation and win-win, and promote the innovative development of the two countries.

6.3 Research Deficiencies and Prospects

This paper is limited by the lack of public venture capital return rate data in Canada, and there is a certain error in the estimation of the overall return rate in Canada. With more public data disclosure in the future, the research can be further deepened. In the future, China and Canada will have a broad space for cooperation in venture capital. With the regional development of global capital flows, we can further study the cooperation model between the two countries, promote capital cooperation in innovative fields and realize complementary advantages.

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AUTHOR BIOGRAPHY

Baiqing Chen has a bachelor's degree in economics from University of Ottawa and a master's degree in Management from Singapore Management University. His research interest covers finance and investment.