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Analysis of Financial Support Paths in the Implementation of Large-Scale AI Projects

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ABSTRACT

Good Funds are needed to support the large-scale construction of artificial intelligence systems. It has not been determined whether the current financing system is suitable for the nature of these projects; they have strong asset specificity and a long pay-back period. The two types of this study are asset specificity and uncertainty. We will consider the operating modes of the four paths—equity capital, government-directed funds, bank credit and capital markets—and their relationships here. At present, the system of financial support has a hierarchical structure; early-stage venture capital leads, bank credit in the growth stage, and capital markets at the mature stage have all joined this structure. However, there are three kinds of disconnections among these paths: the early-stage projects lack funds; credit disbursement is not linked to equity investment; and the functional boundaries of policy funds and market-based funds are unclear. The traditional risk control system is based on tangible collateral and is therefore not suitable for the features of the AI industry, which has many intangible assets. This is the cause of the above problem. To promote the transition from segmented supply to full-cycle financial support, build an infrastructure for intangible asset evaluation, establish a risk-sharing mechanism for investment and lending linkage, and optimise the incentives of the long-term capital system.

KEYWORDS

Artificial intelligence industry; Large-scale project implementation; Financial support; Financing structure; Investment-lending linkage

1. INTRODUCTION

Artificial intelligence is now in a phase of large-scale commercial application following the formation of a technical system. By 2025, the scale of China's top industry in artificial intelligence will exceed 1.2 trillion yuan. Large-scale projects in areas such as the training of large models, construction of intelligent computing centres and industrialisation of embodied intelligence have entered a phase of intensive construction. Compared with the previous information technology industry, large-scale artificial intelligence projects have three prominent features: the input factors of computing power clusters, high-quality data sets and algorithm talent are highly scenario-specific, and once they are applied, they are not easily transferable to other applications; the speed of technical iteration is high, but commercialisation paths are still unclear, and the range of fluctuation for investment recovery period is relatively large; and the enterprise value mainly comprises intellectual property, data assets and human capital, with a relatively low proportion of tangible assets in the available collateral. Due to the above attributes, the demands for capital scale, use-cycle length and risk-bearing capacity of AI large-scale projects differ significantly from those of traditional industrial projects.

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Large-scale construction of new industries demands structural reforms in the financial system. When the supply structure of funds is not in line with the actual demands of the industry, some projects will be delayed due to a lack of funds, and capital will be tied up in unproductive links. A framework of "fiscal guidance + equity investment + credit support + capital market" for the financing of the AI industry has been established in China, but the synergy efficiency among these paths still needs to be investigated further [1]. Based on the financing requirements of large-scale artificial intelligence projects, this paper systematically analyzes the operating paths and actual boundaries of the four financial routes, diagnoses obstruction links in the path connection, traces their institutional causes, and finally proposes an optimised scheme for full-cycle cooperation. Based on public industry data and policy documents, it is expected that a structural overview of changes in the financing support system for AI will be provided.

2. THE EVOLUTION OF DIVISION OF LABOR BETWEEN VENTURE CAPITAL AND INDUSTRIAL CAPITAL AND THEIR BOUNDARIES

Since about 2010 and the gradual attention paid to deep learning by the industry, venture capital allocation strategies for AI have changed several times [2]. The special attribute of this type of capital is that it does not only address the problem of funds; when the technical path is unclear and the prospect of commercialisation is uncertain, whether to invest and whether to believe that this path is feasible are themselves forms of value discovery at the market level. In the early days, it was almost a must-invest project for any new construction, and the scale of these buildings was large; in the past two years, the construction style has shifted, and the capital has begun to flow into a few flagship projects. Zero2IPO Research provides data to support this; more than 1,400 financing cases have occurred in China's AI sector so far, but most of the funds have been concentrated in a few top-tier companies. A more intuitive reference is that by 2026, only these dozens of core exhibitors of the World Artificial Intelligence Conference will have received more than 100 billion yuan in financing in the past 18 months. The data from the large model field also show that in 2025, there were 22 financing rounds with a total amount of 9.416 billion yuan, and both the number and the amount were lower than in 2024. The reason for the rise in financing amount and the fall in financing quantity is clear: Capital now prefers to invest heavily in projects that have been verified by the market, and its approach to teams in the early stages that have not followed different technical paths is significantly more cautious.

The Logic of Industrial Capital is different. In the pre-IPO financing round of StepFun in 2026, ZTE and Huaqin Technology, among other industrial parties, joined together with the aim of technological synergy and industrial chain construction rather than financial gains. This type of capital naturally has an industrial orientation, provides AI products with its own scenarios, and then uses investment to secure the technological supply. Objectively speaking, this has reduced the cycle of technology application from the lab. However, this model also has obvious deficiencies: The investment radius of industrial capital generally revolves around its own business, cross-domain underlying technologies, and frontier research that cannot see a commercial loop in the short term, and it is difficult to be included in the allocation list [3]. Therefore, although there is a large amount of money in the market, the most basic and cutting-edge directions of the AI industry may still not receive sufficient funds.

3. THE LEVERAGE LOGIC AND ALLOCATION EFFICIENCY OF GOVERNMENT-BACKED FUNDS

The government's venture capital funds have entered the AI industry to address regulatory deficiencies in the market at the strategic and forward-looking levels. For technically uncertain parts with a payback period longer than 10 years, pure market-based capital is generally too short-term.

When government funds are added at this time, they can provide some initial funds for the start-up and also signal to the market that this area has been noticed, thus drawing more social capital to follow.

On January 17, 2025, the National Artificial Intelligence Industrial Investment Fund was established with a total scale of 60.06 billion yuan (Securities Times, 2025). The National Integrated Circuit Industry Investment Fund Phase III added 60 billion yuan to this fund. The fund will have a term of 13 years and is longer than the usual 5-7 years for private equity funds. The structure of this term does not aim to achieve a short-term return [4]. On December 26, 2025, the National Venture Capital Guidance Fund was established and provided 100 billion yuan in fiscal investment (China Government Network, 2025). The Social Capital that will be mobilised is expected to reach a trillion yuan. Since 2025, Haidian District in Beijing has continuously allocated 4.024 billion yuan in special funds for artificial intelligence and accounted for nearly 60% of the investment in the technology sector (Haidian District Finance Bureau, 2025). With the 20-billion-yuan matrix of the Science and Technology Growth Fund, Haidian District allocated 5.887 billion yuan, directly invested 2.218 billion yuan in 23 AI enterprises, and driven 18.8 billion yuan of social capital.

However, we do not know how the money will be used. The guidance fund faces an unavoidable contradiction: the policy aims to go early and high-risk in the frontier area, but the assessment demands the preservation and appreciation of state-owned assets. There is a contradiction among the two goals, and in actual operation, the management side is more likely to favour those growth-stage projects that have existing technical routes and preliminary commercial data [5]. Truly at the seed stage and not yet verified as feasible, frontier exploration does not receive easy access to funds. Existing investment cases also show this: whether they are national or local funds, most of the invested money has gone to targets that have already implemented the initial model, and areas with strong public product attributes and unclear commercial returns, such as basic algorithm research and open-source ecosystems, receive little attention and funds. The government's guidance fund has eased the capital-supply pressure in the AI industry to some extent, but there is still a gap between this and full-scale funding for the "first mile".

4. CONDITIONS, TRANSFORMATION AND STRUCTURAL CONSTRAINTS OF BANK CREDIT INVOLVEMENT

Bank credit has begun to enter the AI industry, and the system of financial support has gradually moved from equity-only to a combination of equity and debt. The basic conditions for the allocation of credit funds are that the company's cash flow and assets are predictable and can be used as collateral. This is not the asset structure of an AI enterprise. Algorithm models, data resources and intellectual property are not easily quantifiable or monetised under the current accounting and credit assessment system. Computing equipment has a physical form but is relatively specific and has a low value for secondary use. The bank's demand for the liquidity of the collateral cannot be easily met [6].

Generally speaking, the two types of commercial banks are: The first is to expand the assessment dimensions. In the past, banks focused on financial statements, but now they have begun to explore the potential of technology and market prospects [7]. In May 2025, Bank of China introduced the "Bank of China Sci-Tech Innovation Computing Power Loan", which includes support for the "computing capacity voucher" amount and computing service contract in the credit assessment, with a maximum loan amount of up to 80% of the computing service contract amount. By September 2025, Bank of China had entered into credit cooperation with 2,300 core enterprises in the AI industry chain and maintained a credit balance of about 410 billion yuan. The second is the professional adjustment of organisational structure. Thirty-one seven specialised technology finance outlets have been established in areas with rich technological resources, and a special team is responsible for the credit assessment of AI enterprises to compensate for the lack of technical knowledge among traditional customer managers.

However, it is unclear whether the "transformation" of bank credit has truly broken free from structural constraints at this time. Among the 410 billion yuan in credit, most of it has been allocated to high-growth and established enterprises with stable revenue and collateral asset bases. The first few projects that are still in the research and development stage and have not generated positive cash flows are unlikely to be bankable. The credit basis of the new product "Computing Power Loan" is still contract assets with government endorsement, and it does not have independent support from the enterprise's own credit. The limit of bank credit intervention is determined by the extent to which AI enterprises' assets are collateralised. Before there is a basic breakthrough in the assessment and circulation system for intangible assets, credit funds can only cover the portion of the AI industry chain that has been "hardened" into tangible assets, and it is difficult to reach the core area of technological innovation.

5. THE CHANNEL EFFECT OF CAPITAL MARKET EXIT AND THE ADJUSTMENT OF VALUATION LOGIC

The capital market has a clear operating path; after the initial equity investment, there must be a way to realise this capital so that it can be reinvested in the next round of funding. The Smoothness of this cycle will affect how much capital is available for the AI industry in the long run [8].

In June 2025, the China Securities Regulatory Commission issued the "Opinions on Setting Up the Sci-Tech Growth Layer on the Sci-Tech Innovation Board and Enhancing Institutional Inclusiveness and Adaptability", expanding the scope of application for the fifth set of standards from biomedicine to artificial intelligence, commercial aerospace, low-altitude economy, etc. Therefore, AI companies that are losing money can still go public. Z.AI Co., Ltd. immediately went public in Hong Kong in December 2025. Before that, it had rounded up 8.3 billion yuan from eight rounds of financing. Moore Threads was also listed on the Sci-Tech Innovation Board in the same month and raised 8 billion yuan. Both Z.AI Co., Ltd. and MiniMax have gone public in Hong Kong, and in July, Z.AI Co., Ltd. raised 31.41 billion Hong Kong dollars through a secondary offering.

The Exit Channel of Mergers and Acquisitions has also opened. Lionhead Technology Development Co., Ltd. acquired 97.44% of the shares of Liper Technology in 2025 and directly entered the field of AI machine vision. Shenzhen Zesum Technology Co., Ltd. intended to acquire a 99.86% stake in Hengyang Data for 1.148 billion yuan. Shanghai Suochen Information Technology Co., Ltd. paid 192 million yuan for 60% of the equity of Likong Technology. These transactions have one feature in common: most of the buyers are enterprises in traditional industries or at the upstream and downstream ends of the industrial chain. They are not seeking financial returns from the AI companies but wish to integrate their technology into their own business and achieve digitalisation. Mergers and acquisitions can be used by venture capital to realise a profit, introduce technology in older industries, and meet the needs of all parties.

However, the Valuation Logic is changing now. In the first half of 2026, although the average single financing amount for the large model sector increased by about three times over 2025, the total number of financing events did not rise at the same rate. The first few enterprises took most of the funds, and this trend also occurred at the time of their IPOs. The Standards for assessing AI enterprises in the secondary market are also changing. Previously, only the technical concept could be used for valuation; now, however, investors also want to know if there is a commercial income and how much [9]. Although this exit channel has been opened, if the channel is only large enough for a few players to pass through, the exit expectations for most AI startup projects will remain unclear. If the uncertainty persists, the early investment will not be fully realised.

6. DISCONNECTIONS BETWEEN PATHS AND SYSTEMIC OBSTACLES IN THE ENTIRE CYCLE

In light of the above four paths, it can be seen that they have not been integrated. The system of financial support has become loose, and now each part is responsible for its own area and works independently. The three are shown in the above.

At the same time, there were early financing gaps and a later capital surplus. AI projects at the seed and start-up stages do not meet the criteria for bank credit, and venture capital is focused on leading-edge ventures; thus, a large number of early-stage projects go unnoticed. This is referred to as the "valley of death" in academia [10]. At the same time, capital is being poured into projects in the growth and maturity stages, and in some sectors, signs of a valuation bubble have already appeared. The capital allocation imbalance is caused by a lack of an effective screening and relay mechanism; thus, money cannot be distributed in an orderly manner according to the risk-return features of projects at different times.

The Connection between Credit and Equity Investment is not ideal either. The theory of credit and equity linkage is very suitable for technology companies, but it is difficult to apply. The Channels for banks to engage in equity investment are relatively few. The amount of the contracted funds for the AIC (Asset Investment Corporation) pilot project was more than 350 billion yuan, but it did not reach the trillion-yuan financing goal for the AI industry. The risk control logic for banks is to ensure principal and interest, and high-risk, high-return investments are for equity. The conflict of these two cultures cannot be solved by a few product designs.

There is also a function mismatch between policy-based finance and market-based finance. Guidance funds are to perform strategic guidance functions and are also under pressure for market-based evaluation. In practice, they tend to be favourable towards the growth-stage project [11]. Policy banks have low-cost long-term funds, but their judgment ability for new-age industries such as artificial intelligence has not been fully developed. By April 2025, the 500 billion yuan of new policy-based financial tools put forward by the Political Bureau of the CPC Central Committee meeting have been fully rolled out. It has not been confirmed that these tools will be used often.

The root cause of the above problems is that the core assets of the AI industry are algorithms, data and intellectual property rights, but the risk control logic of the current financial system relies on physical collateral. The two are not in the same structure. The infrastructure of intangible asset assessment and circulation is not well-established, and financial institutions are thus unable to accurately determine the credit risk of AI enterprises. Risk pricing lacks a foundation, and funds are thus unable to reach these "invisible values".

7. CONCLUSION

Returning to the examination of this article, although all four paths have made breakthroughs, they do not form a continuous series. Venture capital is flowing to the top-tier companies, and it has become progressively harder for new projects to raise funds. Government-guided funds have utilised social capital, but the policy objectives do not align with market-oriented assessments. Bank credit has expanded to cover the AI industry, but algorithms and intellectual property are not easily collateralizable; therefore, credit can only be provided for parts with physical assets. The capital market has opened up, but the exit channels for these companies are limited to a few large enterprises, and most AI projects still lack a clear exit path. These four paths each cover a certain aspect, but they lack effective connections with one another; this is precisely the root cause of the bottleneck in financial support for the implementation of AI.

The bottleneck will occur at this time. The foundation of the AI industry is algorithms, data and talent. Risk control of the financial system still relies on the mortgage of fixed assets. The main cause of the

problem is that the two institutions are not aligned. To improve the supply of funds, adjustments should also be made to the institutional construction at the same time. The Mechanisms for assessing, trading and disposing of intangible assets are not good. Otherwise, these problems will not provide a foundation for risk pricing. Further connect the institutional system for linking investment and lending to allow bank funds to be used in early-stage projects under controlled-risk conditions. Modify the assessment mode for government-guided funds to allow for extended investment periods. Establish several listing criteria and merger and acquisition policies to give companies at all stages of development an exit option.

This paper will present the problems and will not carry out quantitative assessments of the implementation effects of different institutional schemes. This direction will be added to in the future. How the financial support system will keep up with the speed of development of the AI industry is yet to be seen.

REFERENCES

[1] Beraja, M., Peng, W., Yang, D. Y., & Yuchtman, N. (2024). Government as venture capitalists in AI. NBER Working Paper, w32701.

[2] Montanaro, B., Croce, A., & Ughetto, E. (2024). Venture capital investments in artificial intelligence. Journal of Evolutionary Economics, 34(1), 1–28.

[3] Tricot, R. (2021). Venture capital investments in artificial intelligence: Analysing trends in VC in AI companies from 2012 through 2020. OECD Digital Economy Papers.

[4] Geng, X., Liu, J., & Dai, M. (2025). How government-guided funds cultivate and expand patient capital in China's GEM market? International Review of Financial Analysis, 104871.

[5] Li, J. J., Fung, H. G., & An, S. (2024). Government venture capital funds: Balancing the impact of social and financial goals on startups. China Economic Review, 85, 102185.

[6] Hoffmann, A. O., & Kleimeier, S. (2021). How do banks finance R&D intensive firms? The role of patents in overcoming information asymmetry. Finance Research Letters, 38, 101485.

[7] Yu, L., Wang, Y., Yu, Y., & Xu, R. (2025). Patents as loan collateral: Evidence from China. Pacific-Basin Finance Journal, 93, 102802.

[8] Montanaro, B., Cavallo, A., Giudici, G., & Ghezzi, A. (2022). Determinants of the exit value in European venture capital-backed technology startups. Competitiveness Review: An International Business Journal, 32(7), 62–84.

[9] Kampmann, D. (2024). Venture capital, the fetish of artificial intelligence, and the contradictions of making intangible assets. Economy and Society, 53(1), 39–66.

[10] Zhang, J., & Gu, Q. C. (2024). Unraveling the puzzling risk–return relationship: Distinctive roles of government involvement in venture capital investment. Strategic Management Journal, 45(11), 2307–2339.

[11] Ge, G., Xue, J., & Zhang, Q. (2024). Industrial policy and governmental venture capital: Evidence from China. Journal of Corporate Finance, 84, 102532.