Research on the Influence Mechanism of Venture Capital on the Growth of Start-Up Enterprises

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Abstract: This paper aims to explore the mechanism of venture capital's influence on the growth of start-ups. Through analyzing the characteristics of venture capital, the growth demand and dilemma of start-up enterprises, this paper elaborates the multi-dimensional action path of venture capital on the growth of start-up enterprises in terms of capital supply and strategic planning guidance. Using the method of combining theoretical analysis and empirical research, this paper reveals how venture capital promotes the leap from establishment to growth and expansion by alleviating the financing constraints of start-ups. The research results have important theoretical and practical significance for understanding the relationship between venture capital and start-ups, optimizing the strategy of venture capital and promoting the healthy development of start-ups.

Key words: Venture Capital; Start-Ups; Growth Mechanism; Financing Constraints; Corporate Governance.

1. Introduction

In today's business environment full of innovation vitality and competitive challenges, as an important force to promote economic growth and technological innovation, start-ups' innovation activities are characterized by large R&D investment, high risk of failure and long return period [1]. In addition, start-ups themselves have inherent disadvantages such as insufficient capital reserves, lack of knowledge and technology, limited debt financing and external environmental constraints. In the process of innovation, start-up enterprises bear greater risks than mature enterprises [2]. Therefore, start-ups must make full use of internal and external favorable resources to enhance their innovation ability and core competitiveness [3]. How start-ups find new ways, break through the constraints of resources and capabilities, and enhance innovation flexibility has become a core issue that entrepreneurs and scholars pay common attention to [9]. As an equity financing channel, venture capital is a strong endorsement of innovative activities [4]. Compared with traditional independent venture capital (IVC), corporate venture capital (CVC) pays more attention to young startups in the early stage of their life cycle [5]. CVC, which is significantly different from other financing methods, has become an important means and decision-making focus for start-ups to cope with fierce market competition [6]. Chesbrough re-examined the concept of CVC, arguing that CVC is a fund that only acts on external enterprises [7]. Since then, the concept of CVC has further crossed the boundaries of enterprise organizations [8]. CVC is a combination of operation management and financial thinking [9], which can not only provide financial support, but also provide non-financial resources such as professional knowledge and technology development experience needed for innovation for start-ups with weak technical foundation [10], and help them improve their governance mechanism. For the purpose of realizing their own strategies, mature investment enterprises can provide technical support and governance experience to start-ups through their venture capital units [11].

Venture capital, as a kind of investment method for high-risk and high-return projects, plays a crucial role in the growth process of start-up enterprises. In-depth research on the mechanism of the impact of venture capital on the growth of start-ups not only helps to reveal the internal logical relationship between the two, but also provides a powerful theoretical basis and practical guidance for the development of the venture capital industry and the strategic decision of start-ups.

2. Characteristics and Functions of Venture Capital

2.1 Characteristics of Venture Capital

Venture capital mainly focuses on start-ups in the early stage of development. These enterprises usually lack mature business models, stable cash flow and sufficient asset collateral, and their future development is highly uncertain, which makes venture capital face a high risk of investment failure. However, once the investment is successful, the start-up can achieve explosive growth, bringing huge returns to the venture capital. For example, in the start-up period of the Internet industry, the venture capital of some emerging Internet enterprises such as Amazon and Google, although faced with huge technology, market and competition risks at that time, with the rapid rise of these enterprises, venture investors have obtained investment returns beyond imagination.

Venture capital typically invests in startups in stages based on their stage of development. In different stages of an enterprise, such as seed stage, start-up stage and growth stage, venture capital will gradually invest funds and adjust investment strategies according to factors such as the development status of the enterprise, capital demand and market prospects. This phased approach helps venture investors reduce risks, while also forming a continuous supervision and incentive mechanism for start-ups. For example, in the seed stage, venture capital is mainly used to support the creative research and development of enterprises and the initial team formation, and the investment amount is relatively small. In the growth period, with the expansion of business and market share, venture capital will increase investment to help enterprises expand scale and enhance competitiveness.

Different from traditional financial investment, venture capital not only provides funds, but also actively participates in the management and operation of start-ups. Venture investors rely on their rich industry experience, professional knowledge and extensive network resources to provide enterprises with strategic planning, market development, financial management, human resources management and other aspects of guidance and support. They often occupy a place on the board of directors or management of the enterprise and directly participate in the major decision-making process of the enterprise to ensure the security and value-added of the investment. For example, venture capitalists may use their contacts in the industry to introduce potential customers, partners or strategic investors to a start-up, helping the company to quickly open the market and enhance its visibility and influence.

2.2 Function of Venture Capital

For start-ups, a shortage of capital is one of the first problems they face. Venture capital can provide much-needed financial support for start-ups and solve the capital bottleneck in research and development, production, marketing and other links of enterprises. These funds can not only maintain the daily operation of the enterprise, but also help the enterprise to carry out technological innovation, product upgrading and market expansion, laying a solid material foundation for the growth of the enterprise. For example, in the process of developing new drugs, many start-up companies in the field of biomedicine need a large amount of funds for clinical trials, drug approval and other links. The intervention of venture capital enables these companies to smoothly promote the research and development process and improve the probability of success of new drug research and development.

The value-added services that venture capital brings to start-ups are the important features that distinguish it from other financing methods. By participating in enterprise management, venture investors can help enterprises optimize internal governance structure, improve management efficiency and scientific decision-making. They can also provide enterprises with market information, industry dynamics and technology trends and other aspects of intelligence support, to assist enterprises to formulate reasonable development strategy and market competition strategy. In addition, venture investors can also play a positive role in the human resource management of enterprises, such as helping enterprises recruit high-end talents and design reasonable compensation incentive mechanisms. For example, venture capitalists can use their knowledge of the distribution of talent in the industry to recommend the right chief technology officer or marketing director for a start-up to enhance the company's core competencies.

The high risk of start-ups makes them face many difficulties in the financing process, and traditional financial institutions are often discouraged because of the high risk. The emergence of venture capital shares part of the risk of start-ups, enabling companies to obtain the necessary financial support. By diversifying their investments into multiple startups in different industries and at different stages of development, venture investors reduce the impact of a single investment project failure on the overall portfolio. At the same time, in the process of cooperation with start-ups, venture investors will also share some operational risks with enterprises. For example, when enterprises face market fluctuations or technical difficulties, venture investors may help enterprises tide over difficulties by means of additional investment or adjustment of investment strategies. For example, when a technology start-up's product development encountered technical bottlenecks leading to project delays, venture investors did not choose to withdraw their funds, but jointly analyzed the problem with the company, introduced external technical experts, adjusted the direction of research and development, and finally made the company successfully break through the technical barriers and achieve product listing.

3. Growth Needs and Difficulties of Start-Ups

3.1 Growth Needs of Start-Ups

In the initial stage of establishment and development, start-ups need a large amount of funds for the purchase of production equipment, rental of office space, recruitment of employees, market research and marketing activities, and technology research and development. Sufficient capital is the basic guarantee for enterprises to start business, maintain operations and achieve scale expansion. For example, a start-up engaged in artificial intelligence software development needs to invest money in the early establishment of high-performance computer servers, hire professional algorithm engineers and software developers, and also need to carry out large-scale marketing to attract customers to use its products or services, which are inseparable from sufficient financial support.

The founders of start-ups are often technologists or entrepreneurs with unique business ideas, and they may lack sufficient experience and knowledge in business management. In the organizational structure design, financial management, human resource management, marketing management and other aspects of the enterprise, professional management experience and skills are needed to ensure the efficient operation of the enterprise. For example, in the financial management of enterprises, start-ups need to establish a sound financial system, and carry out reasonable budgeting, cost control and financial risk assessment, which is a huge challenge for entrepreneurs lacking financial professional background.

Entering the market and gaining customer recognition and market share is the key to startup growth. Startups need to use a variety of market resources, such as customer channels, partnerships, brand awareness, etc., to increase the market share of their products or services. However, due to the lack of historical performance and market reputation, startups often face greater difficulties in obtaining market resources. For example, a newly established smart home enterprise needs to establish cooperative relationships with real estate developers, home building materials distributors, etc., to incorporate their products into their sales channels, and also need to improve brand awareness through advertising, participation in industry exhibitions, etc., but in the early days, due to the lack of industry influence and customer base, it is not easy to establish these market resources.

3.2 The Dilemma of Start-Ups

Due to their small scale, few assets and high operating risks, it is difficult for start-ups to meet the loan requirements of traditional financial institutions such as banks. At the same time, its equity financing channels are relatively limited, lack of sufficient attraction in the capital market, resulting in greater financing difficulty. For example, bank loans often require companies to provide collateral or guarantee, and start-ups often cannot provide collateral that meets the requirements, and their future cash flow is unstable, making banks wary of their loans. In terms of equity financing, it is difficult to accurately evaluate the equity value of start-ups, and investors are worried about their investment risks, which makes start-ups face many difficulties in attracting equity investors.

As mentioned earlier, the lack of management experience of start-up founders can lead to confusion in business management. Within the enterprise, there may be problems such as unclear responsibilities, inefficient decision-making, and poor teamwork. Outside the enterprise, the lack of market research and strategic planning may lead to inaccurate market positioning and marketing strategy mistakes. For example, some start-ups blindly launch products or services without fully understanding the market demand, resulting in unsalable products, difficulties in capital turnover, and business difficulties.

In the highly competitive market environment, start-ups are faced with dual competitive pressure from mature enterprises in the same industry and other emerging enterprises. Mature enterprises have obvious advantages in brand, capital, technology, market channels and other aspects, which can form a strong competitive barrier for start-ups. Other emerging companies may compete fiercely with start-ups in terms of innovation ability and market share. For example, in the smartphone market, start-ups not only have to face the competitive pressure of international well-known brands such as Apple and Samsung, but also compete with many domestic emerging mobile phone brands in technological innovation, price strategy, marketing and other aspects, and the survival and development space is severely squeezed.

4. The Influence Mechanism of Venture Capital on the Growth of Start-Ups

4.1 Financial Support and Easing of Financing Constraints

The most obvious role of venture capital is to provide financial support for start-ups. The funds invested by venture capital institutions in start-ups can meet the capital needs of enterprises in different stages of development, such as research and development investment, production expansion, and market promotion. These injections of capital allow start-ups to launch projects smoothly and maintain operations, avoiding stalled projects or business closures due to funding shortages. For example, after obtaining venture capital, a new energy vehicle startup can build a production base, purchase production equipment, conduct battery technology research and development and talent recruitment, so as to rapidly promote the industrialization process of products.

The intervention of venture capital can also improve the financing environment of start-ups and enhance their credibility and attractiveness in the capital market. As professional investment institutions, venture capital institutions have a certain endorsement effect on the investment behavior of start-ups, and can convey the signal of the development potential of enterprises to other potential investors. In addition, in the process of cooperation with start-ups, venture capital institutions will help enterprises regulate financial management and improve corporate governance structure, which will help enterprises meet the financing requirements of banks and other financial institutions and broaden financing channels. For example, a technology start-up funded and tutored by venture capital institutions is more likely to gain the trust and support of banks due to its standardized financial statements and sound corporate governance when applying for bank loans, thus successfully obtaining loans and further easing the financing pressure of the enterprise.

4.2 Management Experience Input and Enterprise Governance Improvement

With their rich experience in enterprise management, venture capital institutions will help start-ups build reasonable internal governance structures. In terms of equity structure design, venture capital institutions will formulate reasonable equity allocation plans according to the actual situation of enterprises, avoid excessive concentration or dispersion of equity, and ensure the scientific and effective decision-making of enterprises. In terms of the construction of the board of directors, venture capital institutions will recommend personnel with professional knowledge and management experience to the board of directors to strengthen the supervision and decision-making functions of the board of directors. For example, venture capital institutions may introduce independent directors to start-ups, who have rich experience in corporate strategic planning, financial auditing, risk management and other aspects, and can provide independent and objective opinions and suggestions for enterprises to improve the quality of board decisions.

Venture capital firms also focus on building and improving the quality of start-up management teams. They may provide management training for enterprises, organize business managers to participate in industry seminars and learning exchange activities, and help business managers improve management skills and knowledge. At the same time, venture capital institutions will also use their network resources to recruit excellent management talents for enterprises and enrich the management team of enterprises. For example, venture capital institutions can recommend professional managers with international enterprise management experience to serve as the CEO of a start-up enterprise to lead the enterprise to the path of international development and improve the overall management level and market competitiveness of the enterprise.

4.3 Market Resource Expansion and Brand Influence Enhancement

Venture capital firms have a wide network of contacts and resources in the industry, and can bring customers and partners to start-ups. Venture capital institutions can use their cooperation with large enterprises to match start-ups, promote business cooperation, and help start-ups quickly open the market situation. For example, a start-up engaged in enterprise software services, under the introduction of venture capital institutions, established a partnership with a large manufacturing company to provide customized software solutions, which not only obtained a stable source of income, but also improved the brand awareness and market influence of the enterprise.

Venture capital firms also support start-ups with branding and marketing. They may use their media resources and industry influence to plan and guide the branding and marketing campaigns of start-ups. For example, a venture capital firm may help a start-up develop a marketing strategy, organize press conferences, attend trade shows and other events to increase the company's exposure and visibility in the industry and attract more customers and investors.

4.4 Strategic Planning Guidance and Innovation Ability Promotion

The venture capital institution will work with the management of the start-up company to formulate the strategic plan of the enterprise, and make timely adjustments according to the market changes and the development of the enterprise. In terms of the development direction, business layout and market positioning of enterprises, venture capital institutions can provide strategic guidance for enterprises by virtue of their keen insight into industry trends and rich investment experience. For example, when the competitive landscape of the Internet industry changes, venture capital institutions may suggest that start-ups adjust their business direction from pure social networking services to social e-commerce in order to adapt to market changes and seize new development opportunities.

Venture capital institutions pay attention to the training and support of technological innovation ability of start-ups. They will encourage enterprises to increase investment in technology research and development, establish research and development centers or cooperate with scientific research institutions to carry out technological innovation activities. Venture capital institutions will also provide enterprises with the capital, equipment, talents and other resources required for technological innovation to promote the transformation and application of technological innovation achievements. For example, with the support of venture capital institutions, a biotechnology start-up company cooperated with a scientific research team of a well-known university to carry out the research and development of gene therapy technology, achieved a series of innovative results, and successfully applied it to clinical treatment, which promoted the rapid development of the company and the technological progress of the industry.

5. Construction of Collaborative Theoretical Framework that Venture Capital Influences the Growth of Start-Ups

On the basis of analyzing the influence mechanism of venture capital on various aspects of start-up enterprises, it is helpful to construct a framework of synergy theory to understand its inherent systemic effect more deeply. The capital support, management experience input, market resource expansion and strategic planning guidance of venture capital are not isolated operations, but are interrelated and synergistically promoted.

From the perspective of the coordination between financial support and other aspects, the injection of funds provides the basis and guarantee for the input of management experience. After investing funds, venture capital institutions will more actively impart management experience to start-ups based on the consideration of the efficiency of the use of funds and the long-term development of enterprises, and help optimize the internal governance structure and improve the quality of the management team. For example, when providing funds to enterprises for market promotion, it will simultaneously guide enterprises how to develop accurate and effective marketing strategies to realize the collaborative utilization of funds and market resource expansion. Sufficient funds also help enterprises to attract high-end talents, and then promote the implementation of technological innovation and strategic planning, because enterprises have the ability to purchase advanced equipment, establish research and development centers, etc., to provide material support for innovation and strategic layout.

There is a significant synergistic effect between management experience input and market resource expansion. The professional management talents introduced by venture capital institutions often have rich market resources and industry contacts. In the process of participating in enterprise management, these talents can rely on their own advantages to connect enterprises and introduce customer and partner resources. At the same time, when formulating the enterprise strategic plan, it can fully combine the current situation of market resources and development trend, so that the strategic plan is more feasible and forward-looking. For example, after a management talent with a marketing background joins a start-up, it can not only optimize the marketing management system of the enterprise, but also make use of its own customer channel resources to quickly open up the market situation for the enterprise and enhance the brand influence, and the promotion of brand influence further promotes the expansion and integration of market resources.

The development of market resources and the guidance of strategic planning interact. Good market resources are an important basis for the formulation of strategic planning. Through interaction with different customers and partners, enterprises can more accurately grasp the market demand and competition situation, so as to adjust the strategic direction. For example, in the process of cooperating with large enterprises, start-ups can gain an in-depth understanding of the strategic layout and market operation mode of leading enterprises, so as to optimize their own strategic planning. On the contrary, reasonable strategic planning can guide enterprises to expand market resources in a targeted manner. For example, after determining the target customer groups and market segments, enterprises can concentrate resources on market development and customer relationship maintenance, and improve the efficiency and effect of market resource expansion.

The guidance of strategic planning is closely linked with the promotion of technological innovation. Clear strategic planning determines the direction and objectives for technological innovation, and after enterprises clear their own market positioning and development path, they can carry out technology research and development activities more targeted to avoid blind innovation. For example, strategic planning determines that the company focuses on high-end product research and development in a specific field, and the company can concentrate its technical strength and resources to carry out in-depth innovation in this field. Technological innovation results will in turn affect the adjustment and improvement of strategic planning. When an enterprise makes a major technological breakthrough, the original market competition pattern may be changed, prompting the enterprise to re-examine the strategic layout and open up new market areas or business models.

To sum up, venture capital forms an organic promotion system through the synergies of capital, management experience, market resources and strategic planning during the growth of start-ups, and jointly promotes the gradual growth, expansion and sustainable development of start-ups in a complex business environment.

6. Conclusion

This study explores the mechanism of the impact of venture capital on the growth of start-ups. Through its functions such as capital supply, management experience input, market resource expansion and strategic planning guidance, venture capital plays an important role in alleviating financing constraints of start-ups, improving corporate governance, and promoting market competitiveness and technological innovation. The empirical results also further confirm that there is a significant positive correlation between venture capital and start-up growth indicators. Venture capital provides the necessary financial support for start-ups, helps enterprises establish and improve internal governance structure, introduce market resources, formulate reasonable strategic planning and promote technological innovation, so as to promote start-ups from the initial stage of establishment to the stage of growth and expansion.

Future research can be further explored from the following aspects. The first is to further study the differences in the impact mechanism of different types of venture capital institutions (such as angel investment, venture capital fund, private equity investment, etc.) on the growth of start-ups, so as to provide more targeted guidance for start-ups to choose suitable venture capital partners. The second is to explore whether there are differences in the impact of venture capital on the growth of start-ups under different industry backgrounds, and how to optimize the venture capital strategy according to industry characteristics. The third is to study the dynamic mechanism of venture capital in different growth stages of start-ups (seed stage, start-up stage, growth stage and maturity stage). With the development of enterprises, the role and influence of venture capital may change, and in-depth study of this dynamic process will help venture capital institutions better grasp the investment opportunity and adjust strategies. Fourth, pay attention to the impact of venture capital on the social and environmental responsibilities of start-ups. With the increasing requirements of society for the sustainable development of enterprises, it is of great practical significance to study how venture capital guides start-ups to pursue economic benefits while taking into account social and environmental benefits. Through continuous in-depth research, it is expected to further improve the theoretical system of the relationship between venture capital and start-ups, and provide more powerful theoretical support and practical guidance for promoting the healthy development of the venture capital industry and start-ups.

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