

Study of the Impact of Private Equity Involvement on Corporate IPO Decisions

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Abstract. At present, private equity investment has become a relatively popular option for financing enterprises of unlisted companies. This paper conducts a case study on the changes in profitability, development, and technological innovation ability of NAI XUE before and after its listing. Tiantu invests in this famous listed catering company to explore the issue of how private equity intervention affects the decision-making of enterprises to go public. The single-case study found that personal equity intervention can help enterprises accelerate the speed of financing, improve their soft power, profitability, and competitiveness, and accelerate the listing process. They proposed a profitable way for private equity firms to continue to hold shares after listing. Under its unique operation mode and management ability, private equity supports enterprises in management, technology, resources, and other aspects. Resource integration helps solve the difficulties in developing enterprises before going public so that they can concentrate on technological innovation.

Keywords: Private equity, IPO, Single case analysis method, Tiantu.

1. Introduction

Private equity investment is an industry that originated in the United States and was established to solve the financing problems of small and medium-sized enterprises (SMEs). It invests in the interests of unlisted companies through private equity funds. It has been developing rapidly with the characteristics of diversified sources of funds and focusing on emerging industries, which was introduced in China in the 1980s. China introduced it in the 1980s, and profits are made through exit mechanisms such as initial public offerings (IPOs) and equity agreement transfers. Its process is divided into fundraising, investment, management, and retirement. It has been rapidly popularized and developed globally in recent years due to its simple procedures, risk migration, and flexible investment and financing advantages. According to Vanguard's annual report, the U.S., as a pioneer in utilizing private equity, has seen a significant downward trend in the number of its listed companies in recent years as the number of private equity investment companies increased. From this, it can be preliminarily judged that private equity investment, while assisting in the further smooth development of the market, has had a reverse impact on the entry of companies into the A-share market and how a company enters the market to raise funds from the outside world through an IPO no longer has uniqueness.

The main reasons why many companies choose not to go public are that they can avoid the pressure of information disclosure, avoid equity dilution and loss of control, avoid the impact of market volatility and share price fluctuations, and help protect business secrets and core competitiveness, etc., or some companies have sufficient funds of their own. They do not need to go public to raise capital through the capital market [1]. Therefore, some growing companies have chosen this route of not going public as a more suitable direction for their development after accepting private equity funds based on several considerations. However, it cannot be denied that raising funds in the public market brings advantages such as initial returns [2]. This paper focuses on the validity of private equity firms' decision to go private and the predictions of future emerging firms about this choice. The research selects a relatively representative enterprise - NAI XUE (Shenzhen Pindao Catering Management Co., Ltd.) as the research object, based on the authoritative Sina Finance and other data

websites and NAIXUE's official website searched for the relevant data for the graphical analysis using a single-case analysis and qualitative comparative analysis (QCA), and the use of a single-case analysis. Through single case analysis and qualitative comparative analysis (QCA), the research attempts to study the issue of private equity intervention in the company's decision to go public.

This paper has particular theoretical and practical significance. Firstly, through in-depth case analysis, this paper can further explore the importance of private equity's financing role in growing companies, predict the reasons why some unlisted companies choose not to go public after value-added through private equity and its preliminary judgment on the accuracy of decision-making, and expand the existing research results of personal equity investment cases. Secondly, because of the broad development prospect of the private equity market, with the further development of private equity investment, enterprises at different stages will most likely mainstream this investee method, and this paper will provide reference suggestions on whether companies go public or not and how they develop. Finally, the general profit model of private equity investment to the end of the company's independence, listing or bankruptcy for the termination of the benefits profit model is relatively single; this paper analyzes the unique profit model of private equity investment before and after the IPO of NAIXUE long-term shareholding for the innovation of the profit model of private equity investment to provide a new way of thinking.

2. Theoretical Analysis and Literature Review

A listed company is a specific component of a joint stock limited company, which is divided into narrow and broad senses; here, we are discussing the listed company in the little mind, i.e., after reaching a certain level of size through IPO, its shares are authorized by law to enter the centralized trading market of securities for trading.

IPO is the first time an enterprise sells its shares to the public. Following the requirements of administration by law, openness and transparency, collective decision-making, division of labor, and checks and balances, the process of IPO is divided into the main links of acceptance, meeting, question and answer, feedback meeting, pre-disclosure, preliminary examination meeting, issuance examination meeting, sealing of the file, post-session matters, approval of the issuance of the IPO, etc. Generally speaking, once the initial public listing is completed, the enterprise can apply for listing and trading in the stock exchange or quotation system. Exchange or quotation system for listing and trading [3]. IPO is a way for a company to go public and issue shares; it must be a joint stock company. Generally, the company will first IPO, that is, through the shares of the limited company of shares sold to the public, the shares of the initial public offering are completed, this company can apply to the stock exchange or quotation system listing and trading, and thus ended the company listing and trading. Some studies have shown that the proposed use of IPO is categorized into three types: growth opportunities, debt service, and working capital, and the intended use of IPO for growth opportunities and operating capital is positively correlated with the grayness of the IPO, while debt service is negatively correlated with the initial return of the IPO [4]. Private equity, from the point of view of the investment method, refers to the equity investment manager with particular equity investment experience through the personal placement form of equity investment in non-listed companies; the investment funds can come from individuals or groups and in the implementation of the process to consider the future, including listing, mergers and acquisitions, liquidation and other exit mechanisms. The profits are mainly derived from two aspects: one is from the growth premium of the enterprise, and the other is from the premium of the secondary market (liquidity premium).

Private equity investment institutions have professional advantages in capital, resources, talents, management, etc... They are themselves an extensive collection of resources with the functions of fundraising, resource integration, and advanced management experience. At the same time, due to private equity investment involves more enterprises, the enterprises and projects involved in the investment have accumulated a wealth of knowledge, so compared with the enterprise, private equity investment institutions have a keener intuition of the project carried out by the enterprise itself, and

have a more detailed knowledge of the risk. In addition, the factors that play a leading role in the enterprise development process are talent, equipment, capital, information, etc... Basically, there is a high degree of consistency, and private equity institutions have a clearer understanding and knowledge of the critical elements such as talent, equipment, information, etc., because of their rich experience in investment. They even possess abundant resources that far exceed those of the enterprises, which can positively impact their development. The company can bring good and positive influence to the development of the enterprise. Resource integration can solve the worries of enterprise development and let enterprises concentrate on technological innovation. Therefore, private equity involvement has significantly impacted the number of companies in the A-share market.

Liang et al. Through theoretical analysis and research hypotheses, with China GEM IPO from 2017 to 2022 as the research object, to explore the relationship between private equity investment and enterprise innovation strategy, compared with separate investment, private equity investment has a more substantial supportive role in promoting enterprise innovation in this aspect. It is concluded that private equity investment can promote corporate innovation and strategic cooperation and significantly impact substantive flat innovation [5].

In contrast to using public placement alone as an incremental source of funds, private equity participation will also cause losses to the company; one is the loss of autonomy, and the other is the distribution ratio of earnings after listing [6]. Therefore, the private equity funds revealed only relative advantages; the specific choice is based on the actual market conditions and other factors to decide. The reasons for the decision to go public are manifold and depend on the relative costs of public and private capital. Michael Ewens and Joan Farre-Mensa point out that even if one of the critical elements of the change in the trade-off between going public and staying private, as in the United States, is changed - the deregulation of private funds - it only allows the market to reach a new equilibrium, not indicating a failure of the IPO market [7].

In addition, Jiang Chen believes that the key factor for enterprises to realize sustainable development is corporate innovation, which is constrained by various aspects such as capital and technology, and the intervention of private equity can protect corporate innovation. Therefore, it is imperative to explore the relationship between corporate innovation and private equity [8].

This paper mainly discusses the relationship between private equity and the company's listing, and the company's listing cannot be separated from the enterprise's innovation. Therefore, innovation, private equity, and company listing are closely connected. Then, the accuracy of the judgment of the listing decision affected by personal equity intervention will play a significant role in the future economic direction.

3. Research Methods

This paper utilizes a single case study approach to delve into specific situations and phenomena to reveal the influences behind them by understanding the individual case factors to help the researcher conduct a practical case analysis. This paper chooses to conduct an in-depth analysis of Shenzhen Pindao Catering Management Co., Ltd (NAIXUE) as the research subject to examine the causes behind its successful IPO by Tiantu Investment and its exploration of its development before and after, mainly based on the following three considerations:

First, Tiantu Investment Group, a company with a complete and reliable empowerment system, is a stable major investor and controlling party of NAIXUE before and after its IPO (accounting for 9.86% of the total share capital). Secondly, the investor and investee are listed companies with stable development and more comprehensive and standardized information disclosure. This is conducive to finding evidence to support the article's argument. Third, NAIXUE is the first company in the new tea beverage industry to complete a public listing in the public record, which makes people think about its intrinsic involvement with the same emerging private equity investment.

3.1. Case Study

3.1.1 Investor

This subsection will cut from the investor's perspective to analyze the Tian Tu Investment Company perspective. Founded in 2002, Tiantu Investment is one of China's earliest professional institutions engaged in equity investment. It is the first local venture capital institution focusing on large consumption, taking the path of in-depth research and specialization. It is highly compatible with the operation concept of Naixue's Tea and other recent fast-growing enterprises. In addition, its development funders include institutional investors such as insurance companies, banks, listed companies, government-guided funds, and high-net-worth individuals, and the projects it invests in cover the three primary consumer upgrading directions of innovative consumption, new retail, and consumer finance.

3.1.2 Financing Side

This subsection will start from the perspective of the financier. NAIXUE is a tea brand founded in 2014. It was innovative to create a "tea + soft omelet" form for 20-35-year-old young women as the primary customer group, insisting on the bottom of the tea for 4 hours a change. The soft omelet does not stay overnight, and most audience favors only the directly managed stores and other unique marketing strategies. On June 30, 2021, NAIXUE Holdings Limited was officially listed on the Hong Kong Stock Exchange. In February 2017, NAIXUE opened the first round of financing and won the angel round of funding Tiantu Investment; the specific amount was not disclosed, and in July of that year, an additional 100 million yuan of A round of financing, Tiantu Investment equity accounted for 20% of the total, becoming the exclusive investor, and to support the NAIXUE began to go out of the Guangdong region, to the whole of China's scope of expansion, and formally opened the "National City Expansion Program" in December that year; in 2018, Naixue's Tea started to expand to the whole of China. Expansion plan"; in March 2018, Tiantu investment injection NAIXUE A + round of financing, after the second round of financing NAIXUE brand valuation of 6 billion yuan. Tiantu Investment was the exclusive investor in NAIXUE's A and A+ rounds of financing, continued to lead the investment in the B round, and was the earliest and the largest institutional shareholder of NAIXUE; with NAIXUE's IPO, Tiantu Investment has also become a big winner. 2021 June 30 Tiantu Investment exited the financing of NAIXUE through IPO.

According to the Rongzhong Financial Report (<https://zhuanlan.zhihu.com>), NAIXUE solved the capital problem in the expansion process through a series of financing with the power of capital [9]. In 2018 and 2019, NAIXUE's operating income was 1.086 billion yuan and 2.501 billion yuan, respectively, a year-on-year increase of 130.2%. As of December 2020, NAIXUE had spread to 70 cities and nearly 500 stores across China. Affected by the Epidemic, it realized revenue of RMB2.114 billion in the first three quarters of 2020, representing a year-on-year increase of 20.8%. Although the number of stores and the revenue scale are snowballing, it is not profitable. In 2018 and 2019, NAIXUE lost 56.58 million yuan and 11.735 million yuan, respectively. Although the first three quarters of 2020 turned a profit, the net profit was only 4.484 million yuan, and the net profit margin was only 0.2%.

3.2. Analysis of the Impact of Private Equity on the Listing of Companies

3.2.1 Impact of private equity investments on the day-to-day operations of a company

3.2.1.1 Revenue from financial support

In technological innovation, enterprises usually invest in private equity rather than their funds. The main reasons include two aspects: first, the enterprise's funds are limited; second, the risk of technological innovation is high, the enterprise's funds cannot effectively resist technological innovation failure, or the risk of capital breakage too long brings about the cycle. Using the leverage function of private equity investment can solve the problem of insufficient capital for enterprises and provide financial support for technological innovation. At the same time, using the risk-sharing function of private equity investment can reduce the risk of technological innovation, ensure that the

average production and operation of the enterprise are not affected, and maintain a good development trend. Figure 1 shows the changes in the company's profitability from 2018 to 2022. It can be seen that from 2019 to 2021, the growth rate of total assets shows an upward trend, indicating that the efficiency of NAIXUE in using its assets to generate profits grows year by year. Still, it fell in 2022, and the preliminary analysis may be that the impact of the global epidemic has caused the catering industry market to experience huge fluctuations, and profitability declined accordingly.

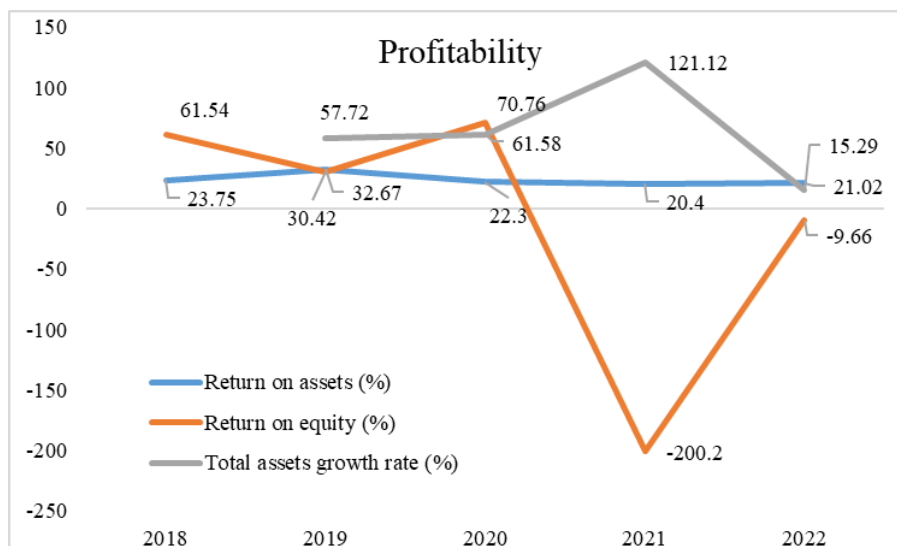


Figure 1. Profitability analysis chart

3.2.1.2. Development capacity

The operating income growth rate is used to measure the growth and market performance of the enterprise; the growth rate is greater than 0, indicating that the enterprise has realized the development of operating income in the past year, the higher the value of the indicator, it means that the enterprise's growth rate is faster. It also means that the enterprise's development prospects are better. The net profit growth rate reflects the enterprise's profitability, operational efficiency, and market competitiveness.

The assessment of NAIXUE's development ability in 2018-2022 is shown in Figure 2; NAIXUE has realized a significant increase in the net profit growth rate and operating income growth rate in 2020 and 2021, which cannot be separated from the brand influence brought by its listing.

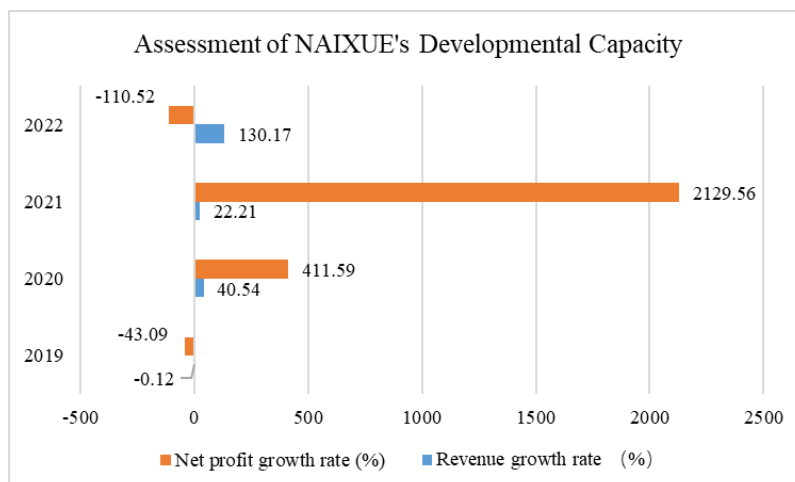


Figure 2. Development capability analysis chart

3.2.1.3. Market

Tiantu Investment has a group specializing in tea drinks and has provided NAIXUE with an analysis of the consumer goods sector, industry reports, and a model for determining consumer upgrades. Tiantu has invested in many excellent consumer brands. In July 2017, Tiantu invested in

NAIXUE's Series A again, helping NAIXUE and its investors Baiguoyuan and Baima Tea Lianliu reach a cooperation between the two parties to provide NAIXUE with fruits and teas, which strengthens Naixue's Tea's strengths in the supply chain.

As shown in Figure 3, NAIXUE has achieved a year-on-year increase in in-store growth with the help of Tiantu's investment, surpassing 1,000 in 2022, and was able to realize an increase in the number of net growths during the Epidemic. As of June 30, 2023, NAIXUE's Tea had 975 stores nationwide, with 329 in Tier 1 cities, 329 in New Tier 1 cities, 229 in Tier 2 cities, and 88 outside Tier 3 [10]. The listing has brought NAIXUE a larger market and broader space for development.

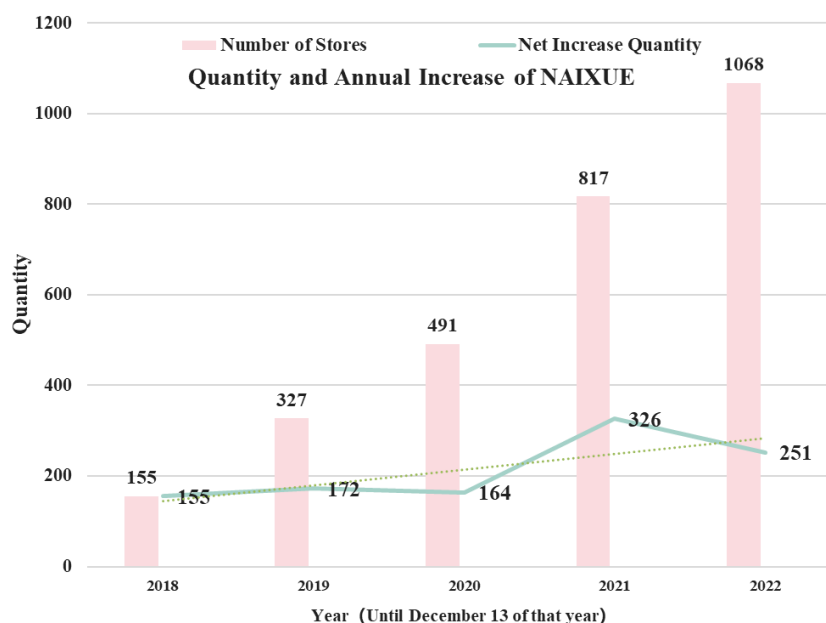


Figure 3. Market analysis chart

At the beginning of 2019, NAIXUE encountered the bottleneck of "slow pace of staff training, reduced business efficiency, reduced consumer drinking experience" on the way to expansion, and the partners of Tiantu Investment realized that it was necessary to start the digital transformation of NAIXUE, so NAIXUE invited the technicians of major Internet companies to form a team to help NAIXUE layout Digital construction, from customers to stores to the supply chain operational efficiency of the depth of the binding, to achieve precision marketing and management. The valuation given by Tiantu is not the highest, but there is no betting treaty in the terms and conditions disclosed by Tiantu's investment, and there is no hard and fast requirement for the number of NAIXUE stores. Before Tiantu invested in NAIXUE, its partners met with NAIXUE's founders bi-weekly.

After NAIXUE's IPO, Tiantu's investment yielded a return of over HK\$4.5 billion. Tiantu's investment helped Nethersole at the management level by improving its staff's professionalism, refining its team's composition, increasing its management's efficiency, and solving the problem of redundancy and chaos in management after Nethersole's tea listing. Let NAIXUE have more time to focus on product innovation and increase revenue.

All the data in this article are from the official websites of NAIXUE (naixue.com), Flush Finance (10jqka.com.cn), and annual reports of listed companies disclosed by Sina Finance (sina.com.cn). According to these data, we made a line analysis chart of profitability and development ability.

According to the analysis of Figures 2-4, we get that the return on assets is in a downward trend after 2019; the epidemic of 2019 has brought a massive blow to China's big economy, which involves disruption of production, lack of consumption, and declines in the stock market. Therefore, NAIXUE has also encountered the bottleneck of development, which is hampered by improving the company's operational efficiency and the staff's training, and the return on net assets is in a downward trend in 2021.

3.2.2 Analysis of pre- and post-IPO development of companies under private equity investment

Development Efficiency Measurement Indicators: this paper uses financial data for measurement, divided into two perspectives: profitability and development ability. In addition, this paper also adds four indicators of technological innovation ability, enterprise scale, liquidity, and equity concentration. Therefore, this paper will measure from the above six perspectives whether the IPO of a company based on being invested by private equity brings further gains. Business performance: the business performance reflects the enterprise's profitability; the more substantial the profitability represents the enterprise's good prospects for development and strong development momentum; good business performance of the enterprise is more attractive to investors, and the premium in the stock offering is relatively high. Kriswanto D. et al.'s research also confirms that the company's performance significantly impacts the competitive advantage to the future return [11].

Innovation ability: Sun Ru has proposed that the participation of private equity investment significantly promotes the company's technological innovation, and the more considerable the amount of private equity investment, the stronger the promotion of technological innovation of the enterprise [12]. The mechanism can be found that innovation ability is an essential part of the core competitiveness of enterprises. Still, it is also an important indicator for investors to assess the value of enterprises, and strong innovation ability will bring higher market valuation for enterprises.

Liquidity: The gearing ratio is the more commonly used measure of corporate liquidity in existing studies.

Enterprise size: Due to the study of the enterprise, several outlets were expanded to expand the development of the specificity of the measure for the number of enterprise outlets. This paper argues that enterprises in non-positive development generally do not choose to broaden the market and sell geographic areas. The larger the enterprise scale, the faster the accumulation of corporate funds, the higher the cash flow rises. At the same time, the ability to resist various types of risk is more substantial, so the enterprise scale is a form of corporate strength.

Equity Concentration: Measured as the sum of the shareholdings of the top 9 shareholders of an enterprise. When the shareholding is highly concentrated, the major shareholders have more control over the enterprise because they control more voting rights and can maximize their income by directly operating and managing the enterprise. That is to say, the higher the concentration of equity, the more influential the enterprise supervision by the major shareholders will lead to improved development efficiency.

4. Conclusion

This paper examines the economic revenue, development capability, market share, and management of listed companies invested by private equity. It explores the impact of private equity on corporate development in terms of profitability, brand prestige, development prospects, and market share. This paper studies the economic revenue, development capability, market share, and management of the listed enterprises; explores the excellent impact of private equity on the profitability, brand prestige, development prospect, and market share of the enterprises; and influences the enterprises' decision to go public in terms of management, technology, capital, and market, and provides new ideas for the innovation of their profit model of private equity investment.

This paper analyzes the reasons for the successful listing of NAIXUE, which cannot be separated from its development, its leaders' clear outlook and planning on the market prospect, and the three rounds of essential financing of NAIXUE by Tiantu Investment. An excellent private equity management team is the most significant core of an enterprise to make it stronger, affecting the entry and the industrial structure and providing outstanding management talents. First of all, non-listed companies in the process of seeking development, encountering insufficient funds, management redundancy, lack of market, and other problems is a common phenomenon, and these non-listed companies looking for investment institutions are generally the following paths: First, in the early

stages of development to find angel investors. Second, looking for financing platforms, such as private equity financing, trust equity financing, and equity pledge financing. This paper focuses on the impact of the intervention of private equity on the listing of enterprises. It analyzes that private equity can bring financial support, guidance of management experience, a larger market, expand the supply chain, introduce strategic investors and management investors, improve the enterprise's competitiveness, and accelerate the process of the enterprise's listing. Secondly, Tiantu Investment provided a lot of help in the pre-development period of NAIXUE, whether in the integration and supply of resources or the internal management of NAIXUE; it played the investor's professional investment ability and capital operation ability to help NAIXUE to realize the process of appreciation quickly; after NAIXUE was listed, Tiantu Investment withdrew through IPO, Tiantu Investment's withdrawal may harm the management and decision-making of the enterprise in short term, but from the perspective of the enterprise, it may harm the management and decision-making of the enterprise in short term. The withdrawal of Tiantu Investment may impair the management and decision-making of the enterprise in the short term. Still, it motivates the enterprise to fully play the employees' enthusiasm and the team's cooperation ability in the long run. It improves the transparency and standardized management of the enterprise. Finally, private equity utilizes its unique operation mechanism and supports enterprises in management, technology, funds, and other aspects under its financial solid capability. Resource integration helps enterprises solve difficulties before going public, including unsound systems and limited financing channels, to carry out technological innovation better.

Due to the problem of data availability, this paper chooses case study and theoretical analysis as the primary research method and does not do quantitative research. It is hoped that a more detailed study of private equity intervention can be carried out in the future based on the availability of data sources.

Authors Contribution

All the authors contributed equally and their names were listed in alphabetical order.

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